

Hafler®

PH34 / PH44

Phono SUT's



User Guide

Made in Canada 🍁

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PH34 & PH44 PHONO STEP UP TRANSFORMER

USER GUIDE

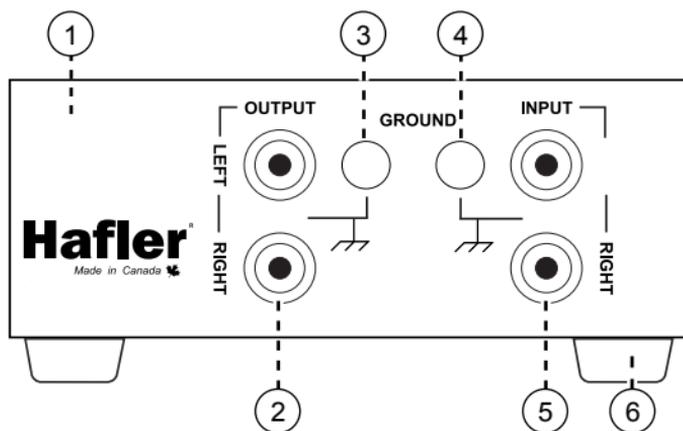
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Thank you for purchasing a Hafler phono step up transformer. As you likely know by now, you have what is likely the finest SUT ever made.

Before making any connections, make sure your audio system is turned off. This will help avoid loud turn-on and connection transients that can damage more sensitive components such as tweeters.

This manual covers both the Hafler PH34 and PH44. The Hafler PH34 is designed for moving coil cartridges that have a very low impedance – in around 5Ω while the PH44 is designed for moving coil cartridges that have an impedance in the 40Ω to 50Ω range. Matching the impedance of the cartridge with the transformer will optimize the listening experience.

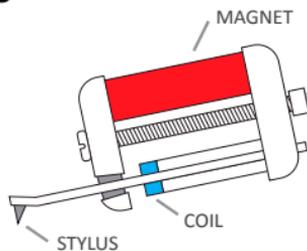
FEATURES



1. **STEEL ENCLOSURE:** Provides shielding from external magnetic fields and radio frequency contamination
2. **OUTPUT:** RCA outputs to connect a phono stage or receiver equipped with RIAA equalized phono input
3. **GROUND LUG:** Use to connect the ground from the Hafler SUT to the ground connection on the preamp or receiver
4. **GROUND LUG:** Use to connect the ground from your turntable to the Hafler SUT
5. **INPUT:** RCA inputs to connect from your turntable to the SUT
6. **RUBBER FEET:** Surface saving feet to secure your Hafler SUT in place

ABOUT MOVING COIL CARTRIDGES

Moving coil cartridges produce a much lower output than a moving magnet. In order to bring their gain up to a usable level, between 60dB and 70dB of total gain is required. This in fact is extremely difficult to do without introducing noise or artifact.

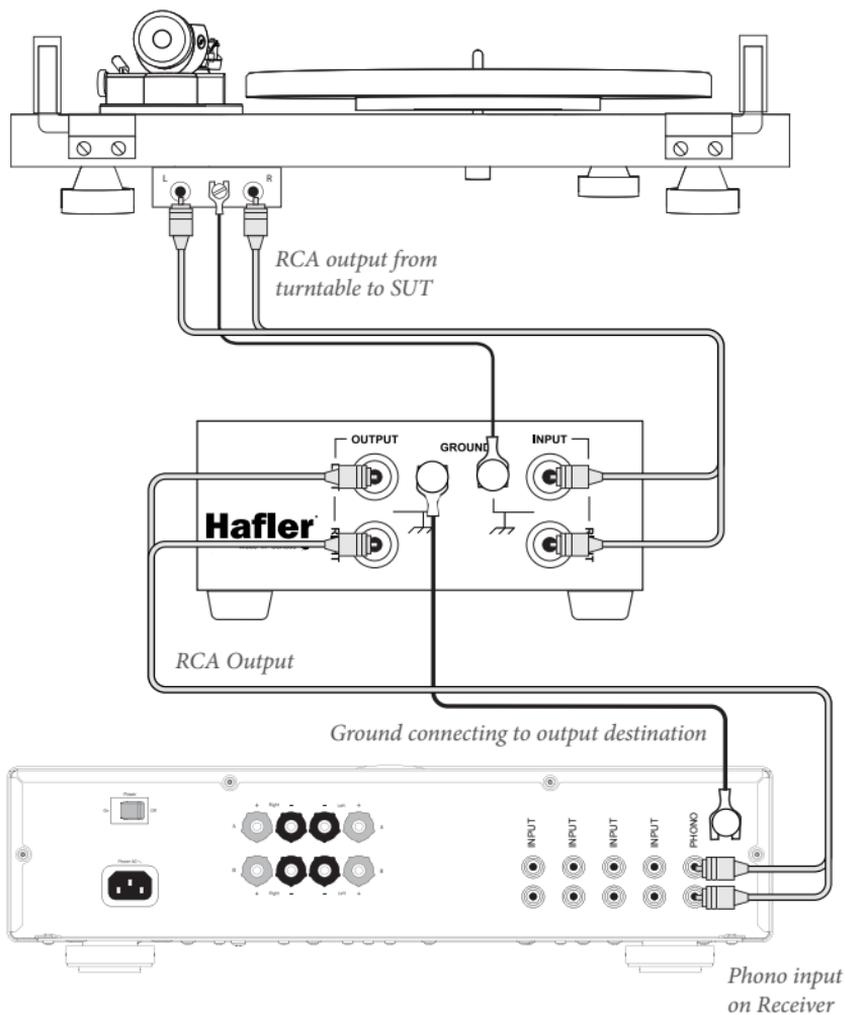


Contrary to other types of phono cartridges, the moving coil principle is not suited for mass production. Each of the four coils contains between 11 and 24 turns of wire, depending on model, and has to be wound by hand under a microscope. The wire itself is much thinner than a human hair. As moving coil cartridges are typically low impedance - low output devices, they demand a transformer or a comparable step-up amplifier. It is well documented that some of the most exclusive moving coil designs deliver the ultimate in analog sound quality when passed through a specially developed matching transformer. These are some of the reasons why moving coil preamps are more expensive.

JENSEN TRANSFORMER INSIDE

The PH34 employs a Jensen JT-34K-DX step-up transformer with a 1:37 turns-ratio that adds 31dB of gain for 5Ω cartridges for use with Ortofon™ or similar cartridges. The PH44 employs a Jensen JT-44K-DX transformer with a 1:10 turns-ratio that adds 20dB of noise-free gain. This is ideally suited for Denon™ or similar cartridges. Jensen's extended frequency response and near-perfect phase accuracy produce unmatched sonic transparency. The use of internal Faraday shielding and double layer magnetic cans gives them immunity to hum, buzz and RF interference. These are some of the attributes that have made Jensen a legend and is why they are often described as the world's finest transformer manufacturer. Jensen transformers also carry a 20 year warranty.

CONNECT



USING

Using the SUT is very easy. You merely connect the output from your turntable to your Hafler SUT and the output from the SUT to the phono input on your receiver. Make sure you use high quality coaxial cables with proper shielding and keep cables as short as possible to minimize noise. It is also very important that you ensure the ground connection from the turntable be properly and securely fastened to the Hafler SUT.

Your Hafler SUT does not require any power to work. It is a passive device that employs two high-performance Jensen audio transformers. These are exceedingly difficult to manufacture as they produce tremendous gain without any electrical power whatsoever. You merely plug in and begin to enjoy.

Hafler SUT's are designed to go into the dynamic phono preamp input of your receiver or preamplifier. In order to properly reproduce audio from a turntable, the output signal must pass through a phono stage in order to boost the signal to a sufficient level. It must then be processed by an RIAA equalization curve to counter the effect that was added to the recording during the mastering and pressing stage.

When using a Hafler SUT with a preamp equipped with a phono input, no other interface is required.



When using a Hafler SUT with a preamp without a phono input, connect the SUT to a Hafler PH60 phono stage to introduce the RIAA equalization curve and extra gain.



THREE YEAR TRANSFERABLE LIMITED WARRANTY

HAFLER (A division of Radial Engineering Ltd.) ("Hafler") warrants this product to be free from defects in material and workmanship and will remedy any such defects free of charge according to the terms of this warranty. Hafler will repair or replace (at its option) any defective component(s) of this product (excluding finish and wear and tear on components under normal use) for a period of three (3) years from the original date of purchase. In the event that a particular product is no longer available, Hafler reserves the right to replace the product with a similar product of equal or greater value. In the unlikely event that a defect is uncovered, please call 604-942-1001 or email service@hafler.com to obtain a RA number (Return Authorization number) before the 3 year warranty period expires. The product must be returned prepaid in the original shipping container (or equivalent) to Hafler or to an authorized Hafler repair centre and you must assume the risk of loss or damage. A copy of the original invoice showing date of purchase and the dealer name must accompany any request for work to be performed under this limited and transferable warranty. This warranty shall not apply if the product has been damaged due to abuse, misuse, misapplication, accident or as a result of service or modification by any other than an authorized Hafler repair center.

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