

MC Transformers



Ortofon's transformers offer a unique and versatile method of enjoying our Moving Coil cartridges

ortofon
accuracy in sound



Why use a transformer?

Step-Up Transformers (SUT) are a serious option for anyone who owns a Moving Coil (MC) cartridge, one that can significantly improve both the sound quality and sonic character. Quite simply, a good transformer is the best way to audition an MC cartridge with the highest performance possible.

Since the output of MC cartridges is lower than that of a Moving Magnet (MM), higher gain is required to utilize them, such as that provided by SUTs or MC phono preamplifiers. Although both devices provide this requirement, both are fundamentally different in function and in sonic character. This is where SUTs are frequently seen as superior; they are completely passive and offer exceptional noise performance and sound quality.

This is due to the fact that the structure of harmonic and intermodulation distortion is fundamentally different

between MC-preamps and SUTs. While an MC pre-amplifier has a constant resistive input impedance, an SUT has an input impedance that is frequency dependent. The harmonic distortion produced by SUTs is highest at the lowest frequencies and drops as the frequency rises, whereas in most MC preamps the distortion increases as the frequency rises. Combined with significantly lower Intermodulation Distortion (IMD), the sound produced with an SUT will be much more open, dynamic, spacious, and natural.

Offering compatibility with most Moving Coil cartridges, Ortofon transformers will enhance the performance of any low output, low impedance MC cartridge.



ST-80 SE Moving Coil Transformer

Ortofon's dual mono ST-80 SE is our top-end model, magnetically shielded in a permalloy case, which in turn is installed into a robust aluminum cylinder bored out of solid aluminum. This massive metal housing effectively reduces the influence from vibration and other external interference sources while ensuring best performance with low noise and the highest channel separation.

Internal point-to-point wiring is made by Teflon insulated, solid-core pure OFC copper-wire plated with gold, together with high quality gold plated RCA jacks that provide the optimum signal transmission and integrity without any coloration.

The functional stability of the transformer is superb thanks to its substantial weight of 1.5 kg.

The ST-80 SE delivers detailed reproduction with a touch of warmth accompanied by a full-bodied sound quality.



Application

The ST-80 SE is an SUT for connoisseurs and will enhance the performance of any high quality, low output, low impedance MC cartridge. Highly recommended for the SPU cartridges as well as for MC A95, MC Anna, Xpression and MC Windfeld.



ST-70 Moving Coil Transformer

The Ortofon ST-70 reserved for the discerning audiophiles and music lovers. The ST-70 combines the fine components along with world-class engineering, for unparalleled sound reproduction.

Starting with high quality Lundahl™ transformers, surrounded by a specialized mu-metal shielding, listeners can be assured that every detail in a complex array of notes is reproduced with utter purity, with freedom from internal and external sources of interference. These two items combined make the ST-70 transformer one of the quietest, most revealing transformers.

Featuring dual mono design, the ST-70 provides discrete circuitry for each channel, resulting in the elimination of crosstalk and possible distortions. This results in cleaner, clearer reproduction with substantially increased stereo imaging. Regardless of the composition being played, the ST-70 expansive stereo separation provides lifelike realism, and accurate tonal balance devoid of coloration.

To further minimize signal degradation and maximize signal flow, the ST-70 has been engineered using high quality industrial grade PCB.

Additionally, gold plated RCA jacks with Teflon insulation provide optimal conductivity for use with high quality interconnects. Internally, the unit is assembled with an absolute bare minimum of internal wiring, preserving absolute signal integrity.



Application

The ST-70 maintains compatibility with most MC cartridges by using internal jumpers to select between two gain/impedance options. This affords audiophiles with broad flexibility while still maintaining a clean aesthetic. The ST-70 transformer is the perfect partner for the Ortofon Cadenza Series.



ST-7 Moving Coil Transformer

Compact and stylish, the ST-7 features a solid housing supported by four rubber feet, which help to reduce unwanted vibrations in the unit.

Dual mono design, including individual shielding of the two channels, improves the imaging of the transformer and reduces the influence of environmental noise.

High quality internal wires combined with gold plated terminals provide optimum signal transmission.

Additionally, the sandwich winding structure used in the ST-7 significantly improves the high frequency response and provides exceptionally clear and open sound throughout the entire frequency range.

Application

The ST-7 transformer is a perfect match for, among other MC cartridges, the MC Quintet Series and SPU Classic models.



ST-M25 Moving coil Transformer

The ST-M25 MC transformer is designed exclusively for the SPU Mono CG 25 Di MkII and SPU Mono CG 65 Di MkII. These cartridges feature a 1.5 mV output, which falls between the MC and MM normal output value, and hence require a specialized transformer for optimal performance.

The ST-M25 transformer provides 12 dB of gain, which is perfect for use with these cartridges along with a standard MM phono preamp.

When paired with the SPU Mono CG 25 Di MkII and SPU Mono CG 65 Di MkII, the ST-M25 provides powerful and dynamic sound quality which is true to the quality and character of early mono recordings.

Application

Recommended for SPU Mono CG 25 Di MkII and SPU Mono CG 65 Di MkII for the playback of respectively early 25 µm and 65 µm mono recordings.





TECHNICAL DATA

Recommended cartridge impedance

Gain

Frequency response

Recommended load

Dimensions

Weight

Recommended cartridge impedance

Gain

Frequency response

Recommended load

ST-80 SE

< 10 ohm
 27 dB at 1 kHz
 10 Hz – 100 kHz
 (-2.5 dB +0.5 dB)
 47 kohm // 200 pF
 95 mm(W) x 153 mm(H)
 x 100 mm(D)
 1.5 kg

ST-70

Configuration A

5 ohm – 50 ohm
 24 dB at 1 kHz
 10 Hz – 100 kHz
 (± 1 dB)
 47 kohm // 200 pF
 58 mm(W) x 135 mm(H)
 x 150 mm(D)
 1.233 kg

Configuration B

< 10 ohm
 30 dB at 1 kHz
 10 Hz – 80 kHz
 (± 1 dB)
 47 kohm // 200 pF

ST-7

2 ohm – 60 ohm
 24 dB at 1 kHz
 15 – 45 kHz
 (+0 dB, -2,5 dB)
 47 kohm // 200 pF
 122 mm(W) x 43.5 mm(H)
 x 102 mm(D)
 790 g

ST-M25

5 ohm – 50 ohm
 12 dB at 1 kHz
 10 – 100 kHz
 (± 1 dB)
 47 kohm // 200 pF
 65 mm(W) x 39 mm(H)
 x 98 mm(D)
 410 g