Moving Coil Input Transformer  
**LL1933**

LL1933 is a high performance moving coil step-up transformer. The transformer combines our dual coil structure with Cardas high purity copper wire in an oversized design. The objective with LL1933 is to provide an alternative for the successful amorphous core LL1931 for those who prefer a low distortion, linear magnetization curve nickel lamination core transformer. The dual-coil structure greatly improves immunity to external magnetic fields from power supplies, motors etc. The transformer is housed in a mu-metal can.

**Turns ratio:**  
$1 + 1 : 8 + 8$

**Pin layout (viewed from component side) and winding schematics:**

**Dimensions**  
(L x W x H above PCB, in mm) 47 x 28 x 24

**Spacing between pins**  
5.08 mm (0.2")

**Spacing between rows of pins**  
35.6 mm (1.4")

**Rec. PCB hole diameter:**  
1.5 mm

**Weight:**  
115 g

**Static resistance of each primary:**  
1.5 Ω

**Static resistance of each secondary:**  
85 Ω

**Frequency response** (serial connection, source 50 Ω, no load / secondaries open):  
8 Hz -- 100 kHz +/- 1.0 dB

**Isolation between windings/ between windings and core:**  
3 kV / 1.5 kV

**Connection alternatives:**

**Serial-serial connection 1 : 8**

Cartridge is grounded through primary center tap. If phono preamp input is unbalanced, connect pins 9 and 8 to input ground.

**Parallel-serial connection 1:16**

Cartridge is grounded through primary “cold”. If phono preamp input is unbalanced, connect pins 9 and 8 to input ground.

If cartridge cable is unbalanced (such as a coaxial cable), ground cartridge through pin 2 and not through pins 1+4.