



Dynavector DRT XV-1s Mono cartridge

Instruction manual

■ Description

The new Dynavector XV-1s Mono cartridge has been developed due to enthusiastic requests from mono record lovers, worldwide. The XV-1s Mono has not been designed as a typical, old fashioned mono cartridge, but developed as a true high fidelity component. It is designed to provide the highest performance and extract the greatest musical expression possible from mono records. The XV-1s Mono follows from the innovative design and technology of the acclaimed XV-1s stereo cartridge and incorporates the following details and considerations:

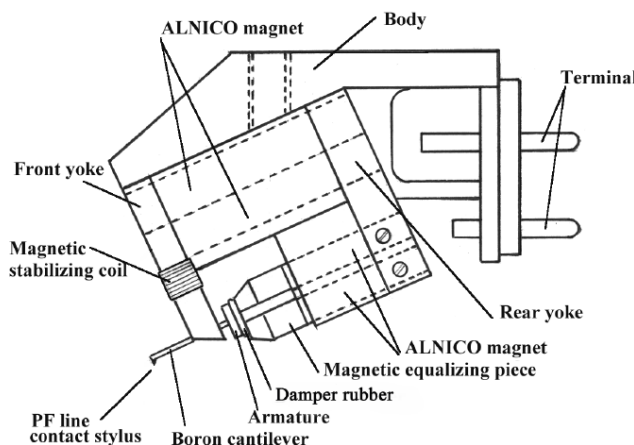
■ Features

1. Compliance in horizontal and vertical directions

Musical information is recorded in the horizontal direction on mono records. Tracking the vertical elements will only lead to extraneous noise or potential damage of the record groove. Given this, the compliance of the XV-1s Mono in the vertical direction has been set considerably lower compared to that of the horizontal direction. A somewhat "thin" and harsh sound is often experienced when playing a mono record with a normal stereo cartridge. A stereo cartridge picks up both the horizontal and the vertical groove information so that both the music and unnecessary noise are reproduced.

2. Special coil bobbin design

The corner of the coil bobbin (armature) of the stereo cartridge is oriented at a 45 degree angle to the record surface in order to pick up both horizontal and vertical groove modulations. With the XV-1s Mono, the bobbin is rotated to be parallel to the record surface. Therefore, sensitivity to vertical modulation is reduced dramatically and horizontal modulation is converted directly to the desired electrical signal. This is the most important feature of the mono cartridge.



3. Bifilar wound coil

A typical mono cartridge has two output terminals (hot and ground) with a single coil. The XV-1s Mono has been designed with the four output terminals having bifilar wound coils. The bifilar wound coil means that dual separate monaural coils are connected respectively to the left and right channel terminals.



As such, a typical stereo phono head amplifier/stereo phono preamplifier can be used as is without issues of hum, noise or ground loops.

4. Innovative magnetic circuit design

The magnetic circuit design of the XV-1s Mono follows directly from the innovative XV-1s stereo cartridge. Ideal characteristics have been achieved through an unparalleled magnetic circuit featuring 8 Alnico magnet rods. The XV-1s Mono also utilizes DV's flux damper (patent) that reduces magnetic distortion. This innovative circuit provides a presentation that is clear, natural and musically expressive like no other cartridge before.

5. Stylus tip and cantilever

The cantilever assembly for the XV-1s Mono is of solid boron with a line contact stylus profile, similar to that of the XV-1s stereo cartridge. A line contact stylus profile is unusual for a mono cartridge, but the depth of grooves remain constant on mono records and the shape of the groove on mono records is at the same average level found on stereo records. Properly implemented, a modern line contact stylus can be used with mono records with great success. As well, the XV-1s Mono cartridge will not damage a stereo record due to its moderate vertical compliance.

■ Fixing to the headshell

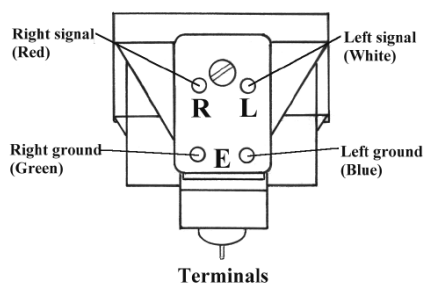
Mounting hole thread size of the XV-1s Mono is M2.5, so please use the enclosed screws to mount the cartridge. Please note that the mounting holes are 4mm depth. Screws that are too long will damage the cartridge body.

The cartridge should be aligned according to the arm manufacturers instructions. They will normally supply a protractor for this purpose.

■ Connection

The connection is similar to that of a stereo cartridge. Connect the lead wires from the headshell to each pin shown below. Best performance is obtained if you use the enclosed lead wires that are 6N copper wire.

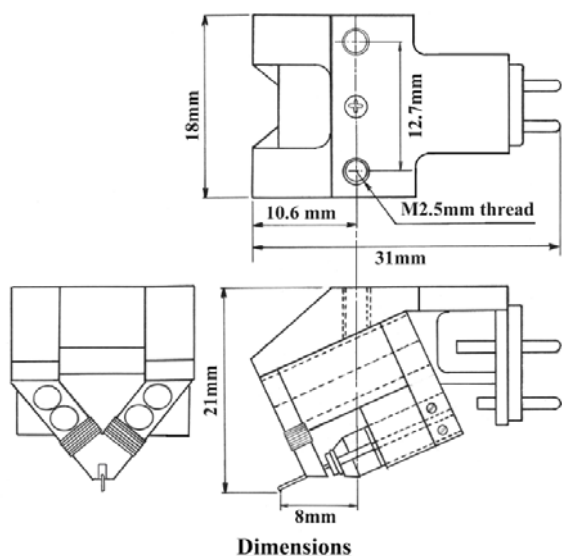
Please note that you should check the "absolute phase" of all connections, as the XV-1s Mono is very sensitive to this.



■ Phono head amplifier

A stereo head amplifier or stereo phono preamplifier may be used. The bifilar wound coils of the XV-1s Mono allow ultimate performance with a stereo phono device, the same as with a stereo cartridge.

The best performances is assured if you use the Dynavector PHA-200 phono head amplifier.



■ Stylus Cleaning

Keep your records clean. Dust causes record wear and sonic distortion. When cleaning the stylus use the soft brush supplied with the cartridge. Brush only from back to front to avoid damage to the stylus assembly. If a dark deposit like tan should appear on the stylus tip, always use the soft brush with a minimum amount of high quality stylus cleaning fluid. No-alcohol stylus cleaning fluid is recommended in a routine maintenance.

We do not recommend to use commercial cleaning vibrators.

■ Stylus Replacement and Warranty

In the case of a worn stylus Dynavector undertake to provide a rebuild program for the XV-1s Mono which entails a complete rebuild of the cartridge. The rebuild includes replacing all moving parts; the cantilever and stylus assembly as well as the coils and suspension.

We also provide a replacement at a special discount rate. This same special discount applies to all non warranty claims please consult your retailer for details.

The cartridge is guaranteed for a period of one year from date of purchase against electrical and mechanical defects provided the instructions have been adhered to and the form overleaf has been completed.

The guarantee does not cover stylus wear nor cover damage to the stylus assembly arising from mishandling or abuse. Should a defect occur the cartridge and its casing together with the guarantee card should be carefully packed and returned to the retailer.

■ Specifications

Type	: Low output moving coil mono cartridge with multi alnico magnets and the flux damper
Output voltage	: 0.26mV (at 1KHz, 5cm/sec. horizontal)
Frequency response	: 20 - 50,000Hz
Compliance	: 6×10^{-6} cm/dyne (horizontal)
DC resistance	: R= 7 ohms
Stylus tip	: PF Line contact shape stylus radius:7 x 30 micron
Cantilever	: 6mm length 0.3mm dia. solid boron
Recommended load	: more than 30 ohms
Tracking force	: 2.6 - 3.2 grams
Weight	: 12.6grmas



This product can be recycled. Products bearing this symbol must NOT be thrown away with normal household waste. At the end of the product's life, take it to a collection point designated for recycling of electrical and electronic devices. Find out more about return and collection points through your local authority.

The European Waste Electrical and Electronic Equipment (WEEE) Directive was implemented to dramatically reduce the amount of waste going to landfills, there by reducing the environmental impact on the planet and on human health. Please act responsibly by recycling used products. If this product is still useable, consider giving it away or selling it.

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