# DENON

# **DL-103**R

# **DL-103R Stereo Cartridge Operating Instructions**

Thank you for your purchase of the DENON DL-103R stereo cartridge.

Read these Operating Instructions carefully before using your DL-103R and keep it for future reference.

#### Accessories

Stylus cleaning brush1	Data sheet
Operating instructions1	Service Station list

### **Before Using**

- The Stylus is very delicate. Applying excessive force to the stylus, such as pressing with a finger can break it. Handle the cartridge with the utmost care.
- 2. A powerful magnet is used in the cartridge. Note that carelessly bringing a steel screwdriver or other such item near the cartridge will result in it being attracted by the magnet and may result in damage to the stylus, so care must be taken. Be sure to use the stylus cover when mounting the cartridge in the head shell, or when otherwise handling the cartridge.

#### Method of Use

# 1. Mounting to the Head Shell

- Adjust to the stylus position specified for the turntable system you are using and mount properly without tilting or turning it. (See Figure 1.)
- The output terminals are color coded for identification as illustrated in Figure 2.
   Match the colors of the head shell leads to the terminals and connect properly.

#### NOTE:

When connecting the cartridge, be sure to use the tipped leads and press them onto the terminals. Applying heat to the output terminals of the cartridge, such as in direct soldering, will cause internal damage to the cartridge, such as wire breakage.

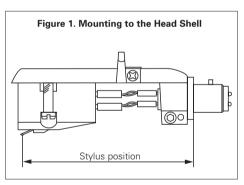


Figure 2. Configuration of the Output Terminals

Left channel Ground (blue)

Left channel Hot (white)

Right channel Ground (green)

Right channel Hot (red)

### 2. Tracking Force Adjustment

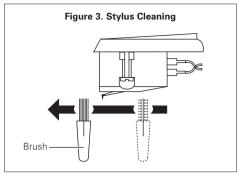
Tracking force in the range of 25 mN  $\pm 3$  mN (2.5g  $\pm$  0.3g) should be used.

#### 3. Output Voltage

The output voltage is 0.25 mV. Use of a step-up transformer for an MC type cartridge, or a head amplifier is recommended.

#### 4. Stylus and Record Cleaning

Clean the stylus with the brush provided as illustrated in Figure 3. Also remove dirt from the record surface with a good quality record cleaner before and after playing.



# **Stylus Replacement**

The DL-103R is a fixed stylus type and so when the stylus requires replacement (due to wear or for some other reason), the whole cartridge is replaced. Take the cartridge to the store of purchase or to a DENON service center. Your cartridge will be exchanged at the stylus replacement price.

# **Specifications**

Compliance

Principle Moving coil (MC) type

Output Voltage 0.25 mV

(1 kHz, 50 mm/s horizontal direction)

Channel Balance 1 dB max. (1 kHz)
Channel Separation 25 dB min. (1 kHz)
Electrical Impedance 14 ohms ±20%

 $5 \times 10^{-3}$  m/N (Using a 100 Hz record)

Stylus 0.2 mm square

solid diamond

Tracking Force 25 mN ±3 mN

 $(2.5 g \pm 0.3 g)$ 

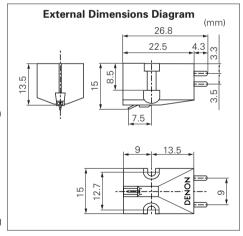
Frequency Response 20 Hz to 45 kHz

Mass 8.5 g

Load Impedance 100 ohms min.

(40 ohms when using

a transformer)



Appearance and specifications are subject to change without notice for purpose of improvement.

# DENON

TOKYO, JAPAN www.denon.com