

ortofon

accuracy in sound

Dynamiske Pick-up'er
Moving Coil Cartridges
Dynamischer Tonabnehmer
Cellules Dynamiques
MC 10, MC 20, MC 20 Mk II

Til lykke med Deres nye Ortofon dynamiske stereo pick-up. Ortofon's dynamiske pick-up'er er og har været anerkendt over hele verden for deres uovertrufne lyd gengivelse, siden Ortofon's introduktion af verdens første dynamiske pick-up i 1948.

Vi beder Dem følge monteringsinstruktionen og ønsker Dem god fornøjelse med Deres nye Ortofon pick-up.

You are now the owner of a new Ortofon Moving Coil Stereo Cartridge.

Ortofon introduced the world's first moving coil cartridge in 1948 and ever since, our moving coil models have been universally acknowledged because of their superb sound reproduction. We request you to follow the mounting instructions carefully, and wish you every enjoyment with your new Ortofon cartridge.

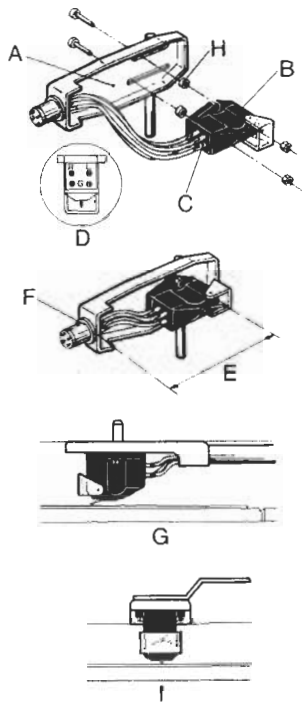
Herzlichen Glückwunsch mit Ihrem neuen ORTOFON dynamischen Stereo Tonabnehmer. Die dynamischen Tonabnehmer von Ortofon sind seit ihrer Einführung im Jahre 1948 als die ersten dynamischen Tonabnehmer, anerkannt und geschätzt in der ganzen Welt.

Wir bitten Sie der Montierungsanleitung zu folgen und wünschen Ihnen viel Vergnügen mit Ihrem neuen Ortofon Tonabnehmer.

Nous vous félicitons de votre nouvelle cellule dynamique stéréo Ortofon. Les cellules dynamiques Ortofon ont toujours été appréciées par le monde entier pour leur reproduction de son irréprochable, depuis l'introduction par Ortofon, en 1948, de la première cellule dynamique du monde.

Nous vous prions de suivre l'instruction de montage et vous souhaitons beaucoup de plaisir de votre nouvelle cellule Ortofon.

ORTOFON MANUFACTURING A/S
11 B, Mosedalvej,
DK-2500 Copenhagen - Valby, Denmark



Mounting

1. The leads from the head shell (A) are connected to the cartridge's (B) terminal pins (C) by means of the clips attached to the leads. Follow the colour code (D) (Never solder directly onto the terminal pins!).

White: Left channel, signal (L)
 Blue: Left channel, ground (LG)
 Red: Right channel, signal (R)
 Green: Right channel, ground (RG)

2. The cartridge is then fastened loosely in the head shell. In the turntable/tone arm instructions you will find the correct distance (E) from the diamond tip to the socket (F). When the correct distance has been adjusted the head shell screws are tightened to secure the cartridge.

3. The tone arm is balanced - in the majority of cases this is done by moving the counterweight back or forth. Follow the turntable/tone arm instructions. The recommended tracking force is then set

4. To ensure optimum tracking ability and channel separation, it is important that the cartridge is parallel with the record (G) when in the playing position. This can be achieved either by adjusting the height of the tone arm or by placing spacers (H) between the cartridge and the head shell.

5. If the cartridge is not parallel with the surface of the record when viewed from the front (I) this can be adjusted by twisting the head shell carefully in the required direction (see the turntable/tone arm instructions).

Some head shell models are produced in a way that may make it difficult for you to mount the cartridge yourself and in such cases, we recommend that you contact your Hi Fi dealer.

Connection to amplifier

Ortofon Moving Coil cartridges have a low inner resistance and small output voltage which necessitates the connection of a transformer or a special pre-amplifier between the turntable and amplifier.

Some amplifiers and receivers are equipped with a special input for use with turntables mounted with a moving coil cartridge. In such cases the turntable is connected to the amplifier without the use of a transformer or pre-pre-amplifier.

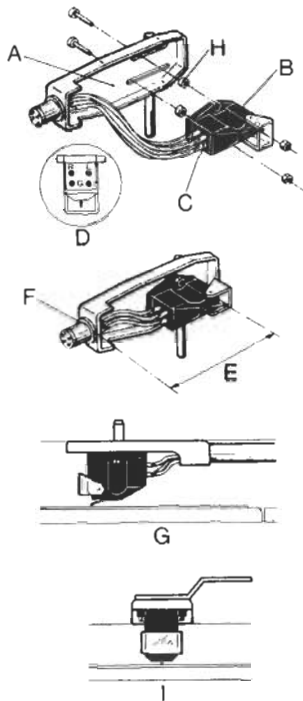
Advice

Remember to clean the diamond regularly by removing dust with a suitable small brush and a recommended cartridge cleaning agent. Let your dealer inspect the diamond at least once a year.

When the cartridge is not in use, the guard should always be snapped over the stylus to prevent damage to the diamond.

Ortofon's Exchange Service

Owing to the nature of the design of the Ortofon Moving Coil cartridges, the stylus is not part of a replaceable assembly and therefore, Ortofon offers, through its dealers, an exchange/repair service. If you should have need for this service please contact your local Ortofon dealer.



Technical data

	MC 10	MC 20
Weight	7 g	7 g
Output voltage per channel at 1000 Hz, 5 cm/s	0.1 mV	0.07 mV
Output voltage per channel at 1000 Hz, 5 cm/s with STM 72 or MCA 76	5.0 mV	3.5 mV
Internal impedance DC resistance per channel	3 ohm	2.5 ohm
Vertical tracking angle	20°	20°
Frequency range	10-50,000 Hz	5-60,000 Hz
Frequency response	10-20,000 Hz +3 dB -2 dB	20-20,000 Hz ±1 dB
Channel separation at 1000 Hz	>22 dB	25 dB
Channel balance	<2 dB	2 dB
Compliance: Horizontal	15 μm/mN	25 μm/mN
Vertical	15 μm/mN	15 μm/mN
Tracking ability at 300 Hz at recommended tracking force	>50 μm	60 μm
FIM distortion at recommended tracking force	≤1%	≤1%
Type of stylus	Elliptical	Fine-line
Stylus tip radius	18/8 μm	8 μm
Equivalent stylus tip mass	0.5 mg	0.5 mg
Tracking force range	17-23 mN (1.7-2.3 gm)	15-20 mN (1.5-2.0 gm)
Recommended tracking force	20 mN (2.0 gm)	17 mN (1.7 gm)

Technical data

	MC 20 Mk II
Sensitivity:	0.09 mV at 1 kHz, 5 cm/sec., 45°
Channel balance:	<1.5 dB at 1 kHz
Channel separation:	min. 25 dB at 1 kHz min. 15 dB at 15 kHz
Frequency response:	20-20,000 Hz ± 1 dB
FIM-distortion:	<1% 300+3000 Hz (4:1) DIN 45542, -6 dB
Tracking ability:	>70 μm at 315 Hz
Dynamic compliance:	12/12 μm/mN at 10 Hz
Vertical tracking angle:	20°
Stylus:	Nude, oriented diamond 0.14 × 0.07 mm Fine-line 8 μm × 40 μm
Equivalent tip mass:	0.5 mg
Recommended tracking force:	17 mN (1.7 g)
Weight:	7 g
DC-resistance	3 ohm
Load impedance:	>10 ohm