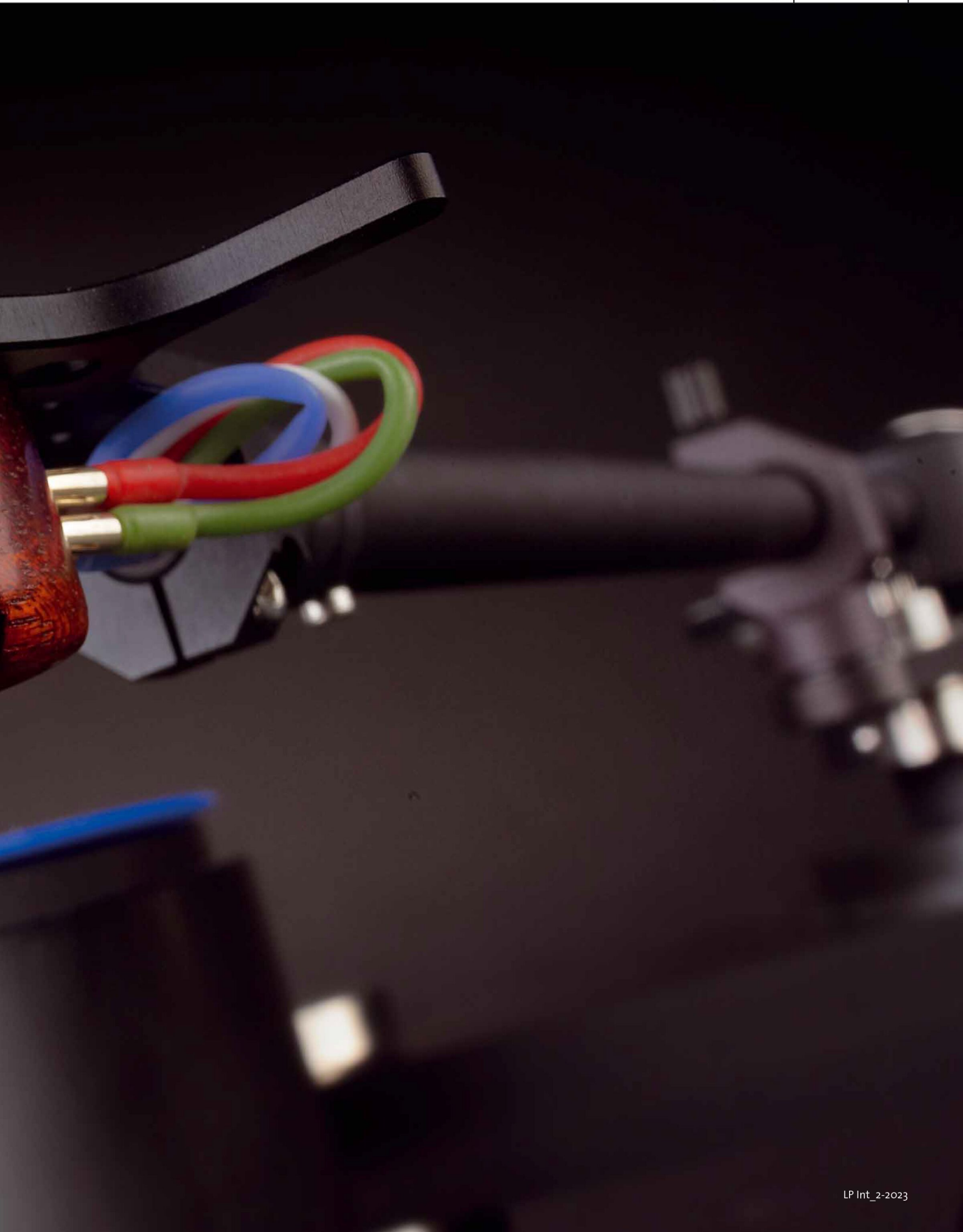
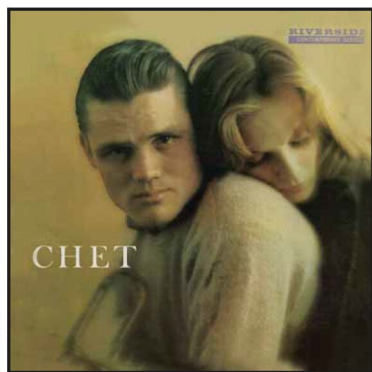


CROSSWISE

Cartridges from the Japanese manufacturer Miyajima Labs always sound somewhat special. They fascinate the listener with their delightfully impetuous nature. High-tech has made its way into the brand-new Carbon model – will this have any effect on the sound character?







What we played

Chet Baker

Chet

Emma Ruth Rundle

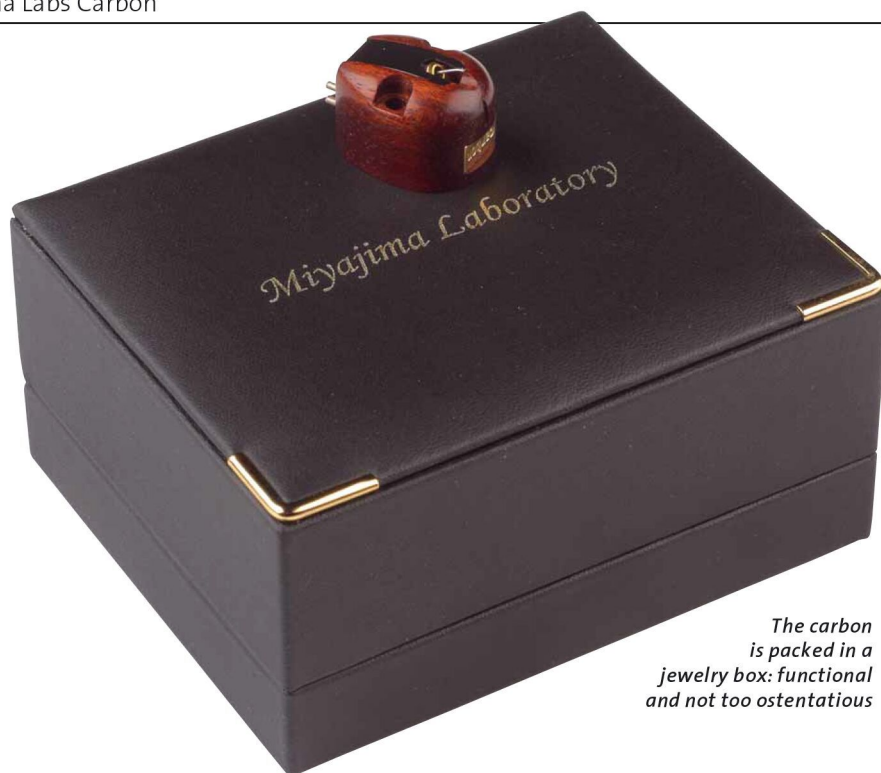
Engine Of Hell

Esbjörn Svensson

Solo

Kosmodrom

Gravitationsnarkose



The carbon is packed in a jewelry box: functional and not too ostentatious

Exterior

Information on Miyajima's gems is not easy to come by, and the sparse facts available on the brand-new „Carbon“ model are no exception. One thing is certain: it costs EUR 3400 and is immediately recognizable as a Miyajima model, if only because of the rounded shape of the wooden body that



The aluminum stylus cantilever has been filled with carbon nanotubes for stiffness

Noriyuki Miyajima uses in slightly varying forms on all of his cartridges. In the case of the new Carbon, it has been given a very organic shape without a mounting flange. As a result, the mounting screws protrude through the entire system body, which means they have to be fairly long. This is not a problem in practice, however, because four pairs of gold-plated mounting bolts with carefully graduated lengths are included. In addition, there is a pair of fastening nuts that you should take good care of - they are particularly small in terms of outer diameter, so that replacements are not likely to be available everywhere. And while we're at it: I find the matching included ceramic cross screwdriver very well done.

The generator concept

The Carbon is a low-output MC cartridge, but the operating principle of its generator is quite different from what is done elsewhere. At Miyajima, it's called the „Cross Ring Principle“ and is used on all of the manufacturer's cartridges. In classic designs, a tensioning thread at the rear pulls the stylus cantilever and voice coil former unit against the rear-mounted damper. The tension thread was a thorn in



Among the accessories, the screwdriver with ceramic blade stands out in particular

Miyajima's side because it presents two potential problems: its tension can change over time, altering the mechanical parameters of the suspension. It also prevents the voice coil former from tilting at the desirable point when deflected by the stylus cantilever, which would be right at its center. With Miyajima now, there is no tension thread. The rubber damper sits in front of the voice coil former, not behind it, so it has to be pushed into position rather than pulled. This is done by a fine pin at the end of a screw that protrudes into the voice coil former from behind and meets the stylus cantilever precisely in the middle. The voice coil former is thus deflected accurately around its center, which makes a special geometry of the winding possible: namely, a cross-shaped pattern. The significantly increased symmetry compared to the classic arrangement reduces distortion, and the elimination of the tensioning thread ensures long-term stability. In addition, the manufacturer was thus able to dispense with a metal bobbin and winds its coils on a much lighter synthetic resin core, thus avoiding hysteresis distortions. This arrangement works excellently, Miyajima holds a patent on it.

Nano technology

The above applies to all Miyajima MCs, but what makes the carbon so special? The eponymous special feature is located at the front end in the form of the stylus cantilever. In this case, it is basically a quite thin aluminum version, which we already know

Teammates

Turntable:

TechDAS Air Force III / Reed 1X

Phono preamplifier:

Clearaudio Balance Reference
BMC MCCI Signature ULN
DIY mit Röhren

MC transformer:

Sculpture A Silver Step-Up

Preamplifier:

NEM PRA-5

Active crossover:

JBL 5235

Power amplifier:

Krell KSA-i400
Yamaha P-2200

Loudspeaker:

JBL 4355

Competitors

Cartridges:

Transrotor Figaro
DS Audio DS003



The body of the Carbon is made of exotic satiné wood



When it comes to packaging, Miyajima Labs sticks to the usual standard and strives for a pretty jewelry box

from the proven Takumi model. For the carbon, however, Miyajima wanted a stiffer stylus cantilever. He achieved this by filling the aluminum carrier with carbon nanotubes. They provide incredible stability and allow for a significantly improved tracking at high frequencies. To do justice to all this, a naked diamond with line contact cut is mounted at the end.

The exotic Satiné wood is used for the first time in the housing and influences the sound of the cartridge in its very own way.

Parameters

Miyajima MCs are quite stiff models across the board. The manufacturer specifies a needle compliance of only 9 $\mu\text{m}/$

mN. In terms of tonearm, it can be a bit heavier, longer models are usually at an advantage. 16 Ohm internal resistance is common for Miyajima, and 0.21 mV output voltage – unfortunately we don't know for which speed the value is specified. However, it won't be very loud. The recommended contact force is 23 millinewtons. The installation of the carbon proves to be not quite trivial, because there is nowhere a straight side edge, by which one could judge the offset easily. The stylus cantilever is also rather well hidden underneath the body, so it's only of limited use as a reference. Once again, I'm glad to have a free spot under a reed twelve-inch arm; the 1X proves to be an ideally suited playing partner for the carbon.

Sound

It performs excellently with a 1:20 transformer, and with my Sculpture A Silver Step-Up it sounds very smooth and, above all, hum-free. However, the Carbon was at its best when I connected it to the BMC Signature ULN, which is the subject of another article in this issue. The combination proved to be extremely transparent and natural, also due to the spectacularly low self-noise of the phono preamplifier. I can't offer you the direct sonic comparison to other Miyajima cartridges, I'll have to dig into my collection of memories of my encounters. And I dare to say that the Carbon is quite unique in terms of high-frequency resolution: what it extracts, for example, in terms of subtleties from the trumpet playing of early Chet Baker, is great art. In the bass, it shows itself to be unwaveringly firm; here, too, precision is very much to the fore. Simple analytics? Not in the least. Rather an obsessive stickler for detail, who can vary the voice of Emma Ruth Rundle in a multitude of minute nuances, but never loses his knack for coherence.

Holger Barske

Miyajima Carbon



- Price
- Distribution
- Phone
- Internet
- Warranty

3,400 Euro
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+49 6187 900077
wodaudio.com
2 years



Miyajima
Carbon

International 2/23

» The Carbon is a fantastic cartridge with tremendous attention to sonic detail. It acts very stable and agile over the entire frequency range and is undoubtedly one of the best you can buy in this respect at the moment.