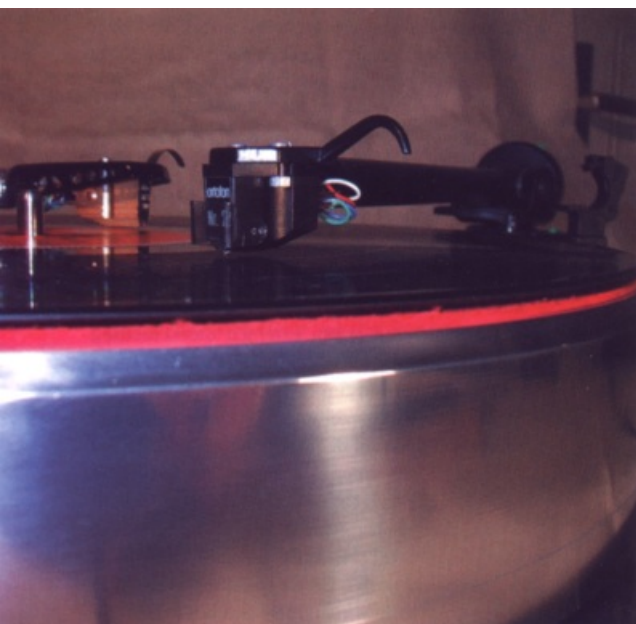


SOLID *by Silvester Straub*

AS A ROCK



Actually, what is required of the ideal gramophone record turntable it is not really all that much. Strictly speaking, it only has to perform two tasks - on the one hand it has to maintain the disc in a precisely uniform state of rotational movement, in which exactly $33 \frac{1}{3}$ revolutions are completed each minute (assuming that what we want to hear is a so-called 'modern long-playing record'), and on the other, to provide a base for the tone arm, which possesses a defined (or, if required, adjustable) distance to the axis of rotation of the record, and which itself should be fixed (from the frame of reference of the DJ standing in front of the apparatus). As simple as this may sound, generations of inventive engineers have been racking their brains to try and come up with the solution of how to fulfil these two requirements as precisely as possible.

But if you have not yet given up your belief in the laws of physics - despite all the experience you may have of the real world - and if you care to recall the physical law regarding the inertia of mass, it won't take long before it occurs to you that the best thing would be to give our record, which we want to maintain in a state of uniform movement, as much mass as possible. Because, after all, the greater the mass of an object, the greater the force required to maintain it in uniform movement.

And indeed, there are many record players available which seek to make use of this phenomenon, and every manufacturer is doing his utmost to deliver a machine whose platter is of a greater mass than any of those made by the competition. These turntables are known as mass drives. And I have been able to get hold of one of these mass drive units to listen to. After all, in the end, what is the use of all the theory? Nobody is interested in hearing about the flat membrane anymore, even though it theoretically displays a fantastic phase linearity and it theoretically hasn't changed since the last century.





This gem of a turntable was supplied complete with two tone arm bases, and also with two tone arms - a Rega RB 250 and an SME 3009, and two Ortofon MC pickups - a No. 2 and an MC 20. It was clear from the design, packaging and additional equipment supplied, which of the latter two was the more expensive. The MC 20 even comes with a small plastic tone arm balance, which a professional wouldn't touch, but which can certainly be of help in an emergency. To start with, I had absolutely no idea of the price categories of the two tone arms. The SME certainly looks more elegant than the Rega, but that doesn't mean a thing, especially when you bear in mind that British engineers often have a high regard for understatement in their designs. When I asked Mr. Wirth of Acoustic Solid to help me out, he told me that the MC 20, the more expensive pick-up, was intended for use with the SME, and the No. 2 was for the Rega, but that it was also possible to try them out the other way round.

Before I could begin, I first had to get hold of an MC preamplifier, a so-called 'Prepre', as it is known in the trade here. The ars! in-house unit, the Lehmann Black Cube, was yet again suddenly unavailable for use, and so I asked Phonosophie in Lurup if they could help me out. They turned up even more than I had bargained for, splashing out on an MC Prepre in a separate casing, together with an external Power Control 1 power supply, rather than the phono circuit board I had been expecting. I had already tried this latter unit out with my own turntable, and was pleasantly surprised with what I found. They also sent me a set of matching (!) audio signal cables, fixed to the direction of travel, and everything else I needed. I would like to express my warm thanks for all your help!

So, I positioned the Solid on an MDF surface, which stands on height-adjustable spikes, in a horizontal plane above the floor of my old-style flat. It may be that there are better conditions under which to set up this turntable, but it is important to ensure that the location chosen is of sufficient area as space is also required in which to position the separately housed motor. Many special turntable bases and tables would not have displayed the necessary space. The setup process is, on the whole, relatively simple. The drive rests on three footplates, upon which spikes are fitted, the height of which can be individually adjusted. The two tone arm bases are made of round aluminium ('rotating gloss') and screwed into an off-centre hole in the support bracket. By altering the angle of the base plate, it was now possible to adjust the distance to the axis of rotation, easily and precisely, within a certain range. The platter is, as I already said, heavy and massive, in a word, solid - as are all the other parts of this machine. The Rega arm is easy to adjust and gives the impression of robustness. The antiskating setting can be altered via a small, spring-loaded, sliding knob.

The VTA can only be set approximately via the screw thread with which the arm is attached to the floor plate. There is no removable headshell and the azimuth setting is fixed. I ignore the scales provided and perform the adjustments using a measuring plate, and, on my first attempt, I manage to achieve the required non-distortion level, using the tracking weight of 2.2 g, as specified by Ortofon.

The arm has a fixed cable, which is soldered in place, the appearance of which places it in the low quality category - it looks like the kind of cable you would normally find plying its trade in a mass production environment. There is no separate ground line. There are some people who will be very pleased with the arm's tuning potential, though. As far as its handling is concerned, the Rega arm all in all gives the impression of being highly robust and uncomplicated. It shows

no signs of filigree ambition, on the contrary, it seems to have been designed for heavy duty use, perhaps as a self-service turntable in a record shop or record library.

The SME arm offers more in the way of fine mechanics. Here, the azimuth, VTA and a number of other geometrical nuances are all adjustable, with the result that the resting position of the arm after assembly is also in the (optically) correct tangential angle to the platter and the arm lift plate comprises precisely the required swing range. The matt aluminium finish effuses high value and precision. The antiskating level is set by means of a thread mechanism, whereby the rule here is again: don't even look at the scale, just use the measuring plate.

The motor of the solid (with frequency-controlled rotational speed, a microprocessor controlled motor regulator is available as a special accessory) is housed in a separate unit, which has no direct connection to the turntable itself, naturally apart from the stand surface which both components share, and of course the drive string.

The motor unit is connected to the mains by means of a thick, transparent cable leading to a plug-transformer power supply with no phase identification. Caution - the transformer unit is so large that it may take up the space of several adjacently positioned sockets. The same applies, by the way, to the Power Control 1 of the Phonosophie preamplifier. So if you have a mains extension strip containing six sockets, you may not be able to use all of them! The precise speed is set using a stroboscope disc and a stroboscope or low-energy lamp (not included), by varying the distance between the motor and the platter. This can be a bit fiddly and takes a moment or two to perform, but it isn't the kind of act which will disturb the high end connoisseur. And do not underestimate the range of settings which can be achieved. The string is stretchable and the motor is heavy! Audibly slow to audibly fast - the entire range is possible. To change the turntable speed, the string must be repositioned onto the other drive wheel, which must of course always be followed by a new fine adjustment, assuming you require the rotational speed to be absolutely precise every time.

So if you are the kind of person who likes to hear a lot of singles, it would be a good idea for you to keep a stroboscope lamp handy.

Before I move on to talk about the listening experience, I would like to say a word about the quality of the workmanship. There is a rumour that the Church of Scientology have developed an atom-bombproof method of sound recording, with which to preserve audio documents of their guru L. Ron 'Source' Hubbard for future generations, and that the financial resources they required to do so were immense. Well, they needn't have bothered - at least that would be your conclusion upon witnessing, or perhaps even setting up the Acoustic Solid.

Apart from the string and perhaps the plastic motor drive wheels and the platter

cover, there is nothing about this turntable that you could ever imagine suffering from mortality. Do you have children who like to play around and experiment with technical equipment? Well, the most they could do is perhaps ruin the set up and the adjustments, but perhaps with the exception of the pickups, there is nothing here which can break. OK, if you have really small children, then maybe the SME arm would be at risk, with its filigree antiskating rods. But, on the whole, heaps of praise are due for this aspect before we even begin.

If you are on the lookout for an analogue system with which the generation to come will have a document of the warm sound of the twentieth century, then you really should take a closer look at the solid.

So, let's finally move over to the interesting part. The moment of truth, which shows us if we can generously disregard the facts that the transformer terminals are non-phase labelled and that light motor vibrations can be felt with the hand, or whether they should be seen as serious and unforgivable construction flaws. Well, how was the sound in the listening room?

The best word with which to describe the Solid is - solid! The sound envelope is based on a rock-solid bass foundation, and every instrument is released into the room with the steady hand of a sculptor. What I really liked was the octave below the mains hum (which did constitute the occasional problem, but which Acoustic Solid immediately knew how to solve by supplying a different string).

The moving coils of the Ortofon did not only deliver energy, but real music. The bass may be somewhat slim coming through my Audio Physik Sparks, but always contoured and sharply locatable. It became clear to me that as an MM listener, I had previously perceived the bassists as doing little more than providing sound energy and sound peaks. I know realise that they also contribute personality and that, within a band, they are responsible for more than simply providing accompaniment but that they contribute

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significantly to the creative process.

The timing is, at the risk of boring you, solid. You could scrape the melodiousness of a good female jazz singer's voice as it were with a teaspoon. Virtually no signs of rumble, impact sounds or excessive background noise.

And now the bad news. The - cheaper - Rega arm is able to perform everything I just discussed, but in my test setup it still sounded somewhat hollow and nasal, and lacked a certain brilliance in the treble range. We are talking about an almost negligibly small degree of difference and some people will not be disturbed by it, but for me it was particularly painful because it is precisely because of this brilliance and faithfulness to detail that I still listen to vinyl records.

In my opinion, I would recommend the more expensive combination with the SME arm and the Ortofon MC20, if at all possible. The enjoyment is that much purer and a trace more detail is also audible, but what makes the extra 1200 marks expense quickly forgotten is the warm, round sound.

Conclusion: The Acoustic Solid Small Machine is a solid turntable through and through, which does more than offer everything that a turntable should offer, but which also shines through its extravagant design and exceptional quality of workmanship. My personal recommendation for this turntable is the SME 3009 tone arm.

