

Local hifi breakthrough!

The ultimate speaker cable

This article describes a revolutionary advance in the science of sound reproduction. It outlines a method for improving the amplifier — loudspeaker interface, beyond the limits reached by current technology.

by **GRAHAM LEADBEATER**

The effect of loudspeaker cables is of paramount importance to the sonic performance of state-of-the-art audio systems. The improvements in performance are however difficult to measure objectively, and this has led to many loudspeaker cable manufacturers taking advantage of this ill-defined area by promoting a multitude of exotic cables with claims of even more exotic performance. These claims are rarely substantiated by double-blind tests in certified listening-rooms. This is unfortunate, because it tends to cloud the issue and provide ammunition for the pseudo-scientific types who will not believe anything unless they can measure it.

Nevertheless, anyone serious about his music will be serious about his cables, and it is to him that this article is directed.

Some time ago I realised the limits of existing cable technology had been reached and that no amount of fiddling with oxygen-free silver bus-bars or active negative-resistance cable was going to improve my music.

Then, when a colleague joked about liquid notes, I started thinking... "What about Mercury speaker cables?" This then is the result of a lot of experimenting with that metal.

Once the practical problems associated with maintaining a continuous mercury link between amplifier and speakers were solved, serious evaluation could begin.

The results? In a word, superlative!"

All the old clichés about veils being lifted are totally inadequate to describe the improvement that results from the use of this technique! Tighter, firmer bass. Transparent middles. Brilliant, highly-defined top end.

Results of double-blind tests with over 15 Audio Engineers have confirmed this. It simply has to be heard to

be believed. Especially with Heavy Metal music.

Now for the practical side — how is it achieved?

In short, a twisted-pair of garden hoses filled with mercury. I have found that it is best to use Nylex Premier hose as it can sound several dB more musical than other brands.

Terminating the hoses poses a few problems, but this is the recommended technique. Take a 100mm length of copper tube whose outside diameter matches the inside diameter of the hose. Scrub it up bright and shiny inside and out with steel wool. Wet it in mercury. Squeeze it flat over 2/3 of its length with a vice. Fold this flattened section back on itself. Heat the whole thing and fill the open end with solder. When cool, drill a hole in the middle of the flat part to match the binding posts on your amplifier or speakers. Insert into hose and secure with a worm-drive clip (see Fig.1).

By far the most important aspect of the whole project is to get rid of air bubbles from the mercury (to make it oxygen-free).

Stand on the roof of your house and let the hose hang vertical while *slowly*

pouring mercury into it. When full, leave it for a week and top-up.

You'll find that it's not enough just to get the system full of mercury; it has to be under pressure. This is best done by providing a header tank for each hose. I used four plastic funnels on a bracket on the wall, and hoses down to "T" junctions from a garden reticulation system (see Fig.2). Once you have a pair of hoses for each speaker, you're ready to connect it all up. Twisting the pair of hoses is important, 360 degrees per metre sounds best to me, but you could experiment.

The main component of this system is the mercury which, at about \$70 per kilo is not cheap. Furthermore, it will be necessary to change the mercury at least every six months as it tends to become "tired", resulting in a loss of sonic integrity. This is known as metal fatigue. This cost can be partially recovered by selling the used mercury to a scrap metal dealer.

As mercury is a cumulative poison you will need a Poisons Licence to buy it. It is a poison which attacks the central nervous system. The last thing you want is little beads of it in your carpet. Handle it carefully. Some people have suggested that, to the average audiophile, some brain damage could only be an improvement.

In conclusion, this is not a project for the faint-hearted. It is expensive it is messy and it is dangerous. But if you take your music seriously, it is the only way to go.

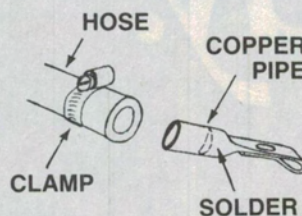


Fig.1

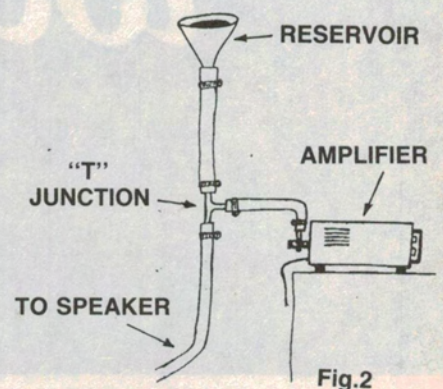


Fig.2