## THE CABLE THAT DOESN'T PLAY

## by MARCO CAPONERA

The **Pearl** power cable is the latest addition to the now sizable family of electrical accessories for Systems and Magic electronics. It makes a grand entrance at the top of the range for cables, presented as the sum of the Italian manufacturer's technical know-how in this area.

The **Pearl**'s plugs have been researched, designed and made in Italy, and are the same as the ones on the **GoldWire plus+** model. Only the nylon shell and glass fiber of the IEC plug is produced by

**Wattgate**, but the internal contacts are in any case assembled in Italy. The pins have contacts (including earth) in pure silver-plated copper.

The producer explains the choice of using copper as a conductor for this cable as follows: "Silver is the most conductive metal, with copper in second place: contacts made in this way are thus six times more conductive (having a resistance six times lower) than equivalents in nickel-plated brass, or brass coated in gold or rhodium. Copper is a soft material, much more than brass, but it's a deliberate advantage: in this way (giving a little when inserting into the sockets) the surface of the contact increases, the resistance is reduced further and the energy transfer from the

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grid to the electronic audio device (especially the impulse) significantly improves. The choice of a soft metal and silver plating is completely in contrast with that of other producers, which tend to go for rhodium plating, usually mirror polished for their top models. Rhodium is actually much less conductive than copper (according to IACS standards: only 38.4% compared to copper, even less than gold (70%) and aluminum (60%)! This means that (in the case of rhodium), in order to arrive at the same level of conductivity as copper, the contact surface of the rhodium needs to be greater than 61%. A second point is that it is very hard, and this factor - combined with the mirror finish greatly decreases "the valleys and mountains" (at a microscopic level) that the metal surface has, reducing its whole contact area (inside the socket) even more! The ductility of copper, on the other hand, means that when the plug is inserted into the socket, its microscopic "mountains and valleys" "give" a little and become "amalgamated" within the plug against the surfaces of the contacts, improving the conductivity even more."



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The **Pearl** has double shielding (aluminum foil and silver-plated copper) against electromagnetic interference (both received and emitted). This shielding is connected both to earth (only on the power plug side, in the so-called "semi-balanced" mode) and to the body of the aluminum pins (both sides), so

that the protection does not stop – as usually happens - a few centimeters from the appliance's input point, but reaches the actual end of the plug.

The area of the internal conductors is 4mmg per pole, slightly more in the case of the earth wire. Finally, the internal insulation inside is not the usual PVC (polyvinyl chloride) but the more prestigious PE (polyethylene). As a result, it has a very low capacity and equally low reactive energy storage; according to the manufacturer, this makes the cable very "ready" for sudden energy demands and variables. The same internal geometry (a very tight spiral with a particular alternation of multiple phase conductors, neutral and ground) is designed to minimize the capacity and improve its immunity to external noise.

We have been using the **Pearl** cable in the listening room of TAA for some time in combination with different types of electronics, both tube and solid state, and its characteristics of transparency, fairness of tone and three-dimensional qualities make it a suitable cable for all devices, provided that they are products of a certain level. In these cases, the results are surprising considering the fact that we are facing a simple power lead. As sta-



ted by the cable manufacturer. it does not seem to have its own tonal character,

allowing the electronics to which is connected to express the best of their ability without affecting their sound.

The frequency response appears to extend to the extremes of the audible band and it also creates a greater sense of dynamism and body. Among the electronics with which we have connected it, the best

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> acceptable, especially in relation to the improvements obtained.

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t, e obtained	amplifier <b>Nad M2</b> , which be-
	nefited particularly in terms
	of bass extension and the
12	roundness of its sound.

The **Rega Osiris** integrated amplifier similarly acquired a better dynamic thrust, and the **Rega Isis** CD player achieved a naturalness and ease of reproduction even better than that obtained with the decent cable that comes with it. Improvements are certainly unlikely with cheaper equipment, but generally we don't recommend that you invest a lot of money in connecting disproportionately priced electronic equipment. In these cases noted, however, the cost relationship seems