LE MAGAZINE SON & IMAGE

DR Acoustics

Power cables and distribution system

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Our review last year of DR Acoustics cables was our first, and very agreeable, contact with this brand. The firm also produce power cables and distribution systems, so a follow-up review was in order. The power cable range is diversified, to say the least, consisting of fourteen models. For this review, we selected an entry-level White Moon and three cables from the Shadow series in the Red Moon range.

THE QUESTION OF CABLES: WHERE TO START?

Many understand that in audio and video systems, everything starts with the power cable, because electrical energy and its mode of transport are central to the performance of any system. This is increasingly true with the sophisticated and technologically advanced devices that make up our high-fidelity systems. Their optimum performance will largely depend on their power supply and the way electrical energy is transmitted. As the power cable is the first thing that the transformer of an audio device 'sees' electrically, the better the power cable, the better will be the quality of the power transmitted to the device. Improvements can be heard all along the reproduction chain, improving sound quality and the musical experience.

We believe that dealing with power supply issues, notably cables, takes priority over acoustic treatment of the listening area. Our systems' devices come with generic cables that get the job done, but do not provide best performance. As proof, we were surprised recently to see a high-end integrated tube amplifier accompanied by a generic, 18-gauge (AWG) cable with molded, rubberized, non-removable male and female plugs! The designer and manufacturer candidly explains that, obviously, the cable cannot exploit the full potential of the device, whose impedance varies from 1 to 16 ohms and whose power consumption attains 360 watts. In any case, he says, "We

are not a designer and manufacturer of power cables and it is up to the purchaser of the device to do what is necessary to obtain a cable of better quality." While generic cables will do a basic job, it helps to think of them as starter cables that will benefit from being substituted by an audiophile grade power cable.

In some ways, the electric current flowing through a power supply cable can be compared to a garden hose: 'the more the flow of water is increased, the greater the pressure becomes and the more resistance one feels.'[1]

IN THE SHADOW RANGE, THE RED MOON

DR Acoustics Shadow range of cables are manufactured with flexibility and lightness in mind. As the micro-silicate damping technique used in some of the brand's cables including the Pegasus models may be too large and heavy for some devices, DR Acoustics has developed new technologies to manage vibration and conductivity, including MTA technology (Multi Tunneling Architecture). Note that the micro-silicate option is nonetheless the first choice for systems equipped with monoblock power amplifiers.

TECHNOLOGY

The Multi Tunneling Architecture (MTA) technology uses twenty-four independent conductors that, together, form the equivalent of a 5-gauge (AWG) wire for Red Moon Ultra, 16-gauge for Red Moon, 12-gauge for Lite and 4-gauge for the entry-level White Moon. The MTA technology makes it possible to obtain even better resolution by enabling electric current to travel through several conductive wires, each carrying a part of the current. At the end of the cable, the signals are recombined, distributing the current to the equipment to which the cable is connected.

In addition, the Multiple Shield Damping System (MSDS) eliminates vibration by using a flexible copper insulation sheath assembly that acts as a mechanical decoupler (three sheaths for the Red Moon, one sheath for White Moon). This vibration elimination technique meets the precise specifications fixed by DR Acoustics for reducing electromechanical and electrical noise inherent in the passage of alternating current in a cable. The system operates in the manner of a 'slinky', the copper sheaths acting as absorbent springs that counter vibration.

The 20-mm diameter White Moon and Red Moon power cables are built around 99.99% pure (OFC) copper conductors and terminated with premium quality audiophile grade Furutech rhodium-plated female and male connectors. If required, the cable can be ordered with a C19 connector of the same brand capable of handling 20 amperes. Each conductor wire is embedded in a military-grade electromagnetic filtration sheath that provides maximum isolation from RFI and EMI type interference. The design of these cables is based on attention to detail and precision with the best possible control of vibrations, allowing a high-fidelity audio system to perform at its highest level. DR Acoustics even uses 3D printing for the cable strain reliefs and for its logo on the cable carrying cases.

ON THE TOPIC OF GAUGE: CABLES AND CONDUCTORS

The American Wire Gauge (AWG) is a standardized system for determining the size of conductive wires. Most audio-grade power cables use one or more 10 or 12-gauge wires. For each two-unit reduction in conductor rating per the AWG standard, the cable doubles in dimension. The Shadow cables are four times larger than standard 10-gauge cables. The multi-conductor cable allows a significant reduction in electron collisions. These collisions or friction cause an increase in cable temperature. The multi-conductor cable creates a 'multi-lane highway' effect for electrons, enabling the cable to perform better without heat gain. Moreover, the geometry of the conductors ensures very low inductance and capacitance.

[1] Ici Radio-Canada, Science Section, article on negative resistance, January 2017

INSTALLATION

DR Acoustics' Red Moon cables were tested on a high-end audio system built around the Jadis DA88S integrated amplifier (equipped with KT-88 power tubes), with and without the Silver Moon power and distribution box. To start off, the entry-level White Moon power cable was substituted for the generic 16-amp AWG cable that was provided with the Rotel RA-1592 integrated amplifier / DAC (200 watts into 8 ohms) reviewed in the previous issue of the magazine. Our first observation is the flexibility of these 20-mm cables and their high quality Furutech connectors. The latter connect with reassuring solidity to our Furutech duplex GTX-D NCF (R) receptacle and to those that equip the Silver Moon distribution system.

APPRECIATION

When evaluating audio cables, it is important to use albums or excerpts that we know particularly well through repeated listening. Diana Krall's *The Girl in the Other Room* (Verve Records, 2004), is one of the most personal recordings from this musician, who usually stays with jazz standards. The singer is surrounded by excellent musicians including Anthony Wilson on guitar, Neil Larsen on the Hammond B-3 organ and Christian McBride on double bass. Tom Waits' «Temptation», very well rendered by Krall, served as a reference track in the evaluation. A first listen with the generic AC cable powering the Rotel provides an acceptable performance, but lacks the highest level of musical emotion. With the White Moon cable connected, listening becomes more active, with the listener better involved in what is happening musically. We note an improvement in bass reso-

SILVER MOON POWER AND DISTRIBUTION SYSTEM

The DR Acoustics Silver Moon power and distribution system is a new addition to the line of products and complements the cables listed above. Among several important aspects of this power supply and distribution box's design, particular attention has been paid to internal wiring, vibration damping and the AC electrical outlets. Solidly built, the Silver Moon features eight high quality Furutech AC sockets. Its four feet ensure excellent adhesion and stability on the floor, regardless of the dimensions of the cables and the connectors plugged into it. The main features are as follows:

- CNC machined solid anodized aluminium chassis with Furutech NCF rhodium plated IEC socket
- Quartz-based anti-resonance system
- Furutech GTX-D NCF (R) rhodium plated sockets
- High-performance Furutech FI-06 NCF (R) input
- Dual EMI/RFI shielding system
- Internal cryogenically treated 99.99% OFC 10 (AWG) copper wiring
- No electrical filtration system
- Dimensions: 33 x 13 x 9 cm
- Weight: 3 kg
- Rated: 15 A, 125V

lution and an improved stereo image, with the orchestra gaining in width and depth. Image stability (constant positioning of instruments in the sound field) is improved with the White Moon cable.

Playing the same track but this time with the Red Moon power cables connected in turn to the Jadis DA88S integrated amplifier, shows clear gains in dynamics, enhanced resolution and improved bass tactility.

Each change through the Red Moon cable series, from the Lite to the Red Moon, from the regular to the Ultra, adds to tonal balance with bass, mid-range and high frequencies as present as one could wish for. Rendering of fine detail improves as one moves up the line, along with an increased separation of instruments and, notably, better attack and musical impact. On listening to the timbre of Anthony Wilson's guitar during his solo, we can almost make out the type of guitar amplifier he is using. The short sequences of Hammond organ are rendered with more presence, and what can be said of the charm of Diana Krall's energetic and warm voice? With the high-end Red Moon Ultra cable, it reaches its peak.

Turning to a different musical style, Nicholas McGegan and the Baroque Philharmonic Orchestra's interpretation of *Vivaldi for diverse instruments* (Reference Recordings RR-77CD), the Red Moon cables bring out the crystalline and melodic clarity of the Italian composer's work. There is great perspective and a level of refinement which raises the level of musical engagement of these concertos. High art indeed!

Of the three Red Moon cables, the one that seems to best enhance listening pleasure is the high-end Ultra cable, although the regular Red Moon and Lite models are worthy contenders that can be confidently associated with high-end electronics. A word on DR Acoustics' Silver Moon: This power supply and distribution system has proven to be a great discovery both through its contribution of neutral sound and its well-thought-out ergonomics. Each of the Red Moon cables connected to it proved to be an excellent match, as good as when connected directly to the Furutech duplex wall outlet.

As to the question "Is it better to connect an amplifier to the power bar or directly to the AC outlet?" We would say, "Nothing is better than trying it!" In our experience, when connected with one of the Red Moon cables, preferably the top performer (the Ultra), our system's components, including the integrated amplifier connected to the Silver Moon, proved to be balanced and coherent, performing to a high sonic and musical level.

CONCLUSION

Like other fields of personal interest, building an audio system requires care and thought. The compatibility and complementarity of components will determine whether integration of components is harmonious, both musically and sonically, or not. Connecting cables and particularly the power supply and distribution centre do not escape the rule.

Ideally, a cable should not impart any sonic signature to a device or system. The role of any cable in audio, and particularly in high fidelity, is to transmit with neutrality and as efficiently as possible the current or the signal from point A to point B. The way in which an audio power-cable designer deals with vibration, lessening the counter-shocks of electron transit while transporting signal freely and instantaneously, will define the brand's image.

DR Acoustics focuses specifically on these issues; all the cables manufactured by this Quebec company share this common denominator that ensures the greatest stability of both the electrical current and the signals they transmit.

DR Acoustics: manufacturer and distributor
White Moon 1.8m: $495
Red Moon Lite 1.8m: $1,695
Red Moon 1.8m: $2,495
Red Moon Ultra: $3,495
Silver Moon power / distribution system: $2,995
www.dracoustics.com