

# Townshend F1 Fractal-Wire

From a pioneer of cryogenically-treated audio cable comes this next-generation interconnect, dubbed Fractal-Wire. Review: **Paul Miller**



**C**ryogenic-cooling is not an unfamiliar concept to the audiophile world but Townshend Audio was certainly in its vanguard when it applied the technique to its Isolda-branded interconnects back in 2000. These flat-conductor cables have formed an integral part of my audio system ever since, so I was intrigued by the company's launch of a 'next-gen' EDCT (Enhanced Deep Cryogenic Treatment) interconnect, dubbed 'F1 Fractal-Wire', that employs an alternative geometry.

Like its DCT interconnects there's plenty of air – the ideal dielectric – surrounding the copper conductors inside their loose-fitting PTFE sheaths and outer, clear PVC jacket [see illustration, below]. But instead of two thin copper strips, the Fractal interconnect has a fine enamel-coated signal strand loosely hand-wound around a thicker, central return conductor. Both benefit from EDCT and Townshend's proprietary and undisclosed 'Fractal-Wire treatment'.

### SAFETY IN NUMBERS

To permit independent verification, Townshend Audio supplied me with two 18m lengths of 0.16mm enamel-coated wire. The untreated batch offered a 15.47ohm impedance at 1kHz while the 'Fractal' version offered 13.75ohm, a reduction of about 10%!

My other measurements suggest that its F1 Fractal interconnect has a lower



capacitance (37pF/m) but slightly higher series inductance (0.68µH/m) than suggested, although the 0.94ohm/m loop resistance is much lower than the rated 2.2ohm. Our figure makes more sense bearing in mind the 13.8ohm/18m resistance of the 0.16mm signal conductor equates to 0.76ohm for a 1m interconnect (with 175mohm for the thicker return core). This is still higher than average though, so I wouldn't be tempted to use it in very long runs. Price is £699/RCA-terminated 1m, £899/2m, £1199/3m, etc.

### FUN WITH FRACTALS

Laced between my Oppo BDP-105D player/DAC and Krell S-1500 amp, these new Fractal interconnects encouraged a genuinely smooth, detailed and liquid-sounding performance. The synthesiser and guitar from Pink Floyd's 'Marooned' [*The Division Bell*; 96kHz/24-bit FLAC, Warner Music Group 29326 – see p108] soared into the room, the percussion illuminating a vivid musical picture, free of grit or grain. Like the older DCT-300 interconnects, the F1 Fractal has a 'dark' quality that lets you hear into the soundstage, walk around the

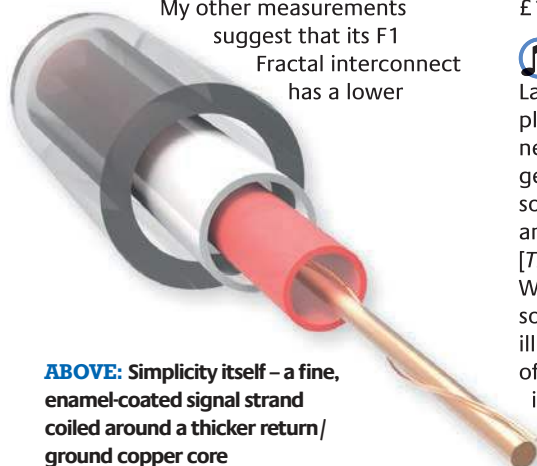
**ABOVE:** The F1 Fractal interconnect is terminated with Neutrik Profi phono plugs with retractable ground collars

musicians and oh-so-easily tease apart the threads of their mix. Bass sounds robust and extended, treble pin-sharp and sparkling but never too hot or fierce. And, yes, the balanced, XLR-equipped F1 Fractal (with two fine signal cores and a £50 premium) sounds even more transparent and finely-etched. ☺

### HI-FI NEWS VERDICT

This is a cracking set of cables – Townshend may be rather coy about the Fractal process itself but the benefits of cryogenic cooling are already well established just as the elegant solid-core conductor and air/PTFE methodology ticks all the right boxes. The cable sounds deliciously smooth and detailed, promoting the kind of easy-listening, inky-black backgrounds typically associated with the best audio systems. Go on, treat yourself!

Sound Quality: 85%



**ABOVE:** Simplicity itself – a fine, enamel-coated signal strand coiled around a thicker return/ground copper core