

NCF Booster



With two or more risers installed, each Booster can take multiple cradles for when equipment stacks place power IECs or other cables in a straight vertical line.

Reviewers: Marja & Henk

Sources: PS Audio PWT; Dr. Feickert Blackbird MKII/DFA 1o5/Zu DL-103;

Streaming sources: XXHighEnd; iTunes; Devialet AIR; La Rosita Beta; Qobuz Desktop, Tidal Desktop; *Sound Galleries SGM 2015* [loaner];

DAC: T+A DAC8 [loaner]; Mytek Brooklyn [loaner]

Preamp/integrated/power: Audio Note Meishu with WE 300B (or AVVT, JJ, KR Audio 300B output tubes); dual Devialet D-Premier; PTP Audio Blok 20; Hypex Ncore 1200 based monoblocks; Trafomatic Kaivalya; Trafomatic Reference One; Trafomatic Reference Phono One; Music First Passive Magnetic;

Speakers: Avantgarde Acoustic Duo Omega; Arcadian Audio Pnoe; Podium Sound One; WLM Sub 12; Sounddeco Alpha F3; dual Zu Submission MKII; Soltanus Virtuoso ESL; Taket Bat-Pure super tweeters; *Bastanis Sagarmatha Duo* [in for review]

Cables: complete loom of ASI LiveLine cables; full loom of Crystal Cable cables; full loom of Nanotec Golden Strada; Audiomica Pearl Consequence interconnect; Audiomica Pebble Consequence; *Bastanis Epilog MKiii loudspeaker cables* [in for review]

Power line conditioning: PS Audio Powerplant Premier; PS Audio Humbuster III; IsoTek Evo 3 Syncro; Audiomica Allbit Consequence

Equipment racks: Solid Tech and ASI amplifier and TT shelf

Indispensable accessories: Furutech DeMag; Clear-Audio Double Matrix; Franc Audio Ceramic Disc Classic; Shakti Stones; Kemp polarity checker; Akiko Audio Corelli, Zanden ZVA-1

Online Music purveyors: qobuz.com, tidal.com, bandcamp.com, amazon.co.uk

Room treatment: Acoustic System International resonators, sugar cubes, diffusers

Room size: ca. 14.50 x 7.50 m with a ceiling height of 3.50 m, brick walls, wooden flooring upstairs, ca 7 x 5 m with a ceiling height of 3.50 m, brick walls and concrete floor downstairs.

Review component retail: €375/ea.

It is *amazing* when you realize that nearly nothing in existence is as solid as it seems. Unless cooled down to excessive degrees, everything moves and vibrates constantly. When you dive into the world of particles, it's *all* vibration. Not even the particles are solid. They're just oscillating forms of energy. All this is so obvious to us that we only know it from science class. There we first learnt about particles like miniature marbles orbiting an atomic nucleus. Later we learnt that those balls don't really exist. Enter quantum physics where even stranger concepts are sprung on us. Nevertheless, we can only live by the grace of these elementary particles.



On a more material level and in our audio-maniac state, vibrations factor again to satisfy our urge for music or in fact our cravings for brain stimulation that releases an extra jolt of dopamine. Studies at the University of London and others show that the dopamine level rises by up to 9% when we listen to music. And wouldn't you know it, that dopamine is the exact same pleasure hormone which releases when we enjoy food and sex – not the most unpleasant things in life to accompany music perhaps? [Dopamine is sometimes referred to as the 'chocolate hormone' because this neurotransmitter is known to be triggered by eating chocolate, even just *thinking* about eating chocolate – Ed.]

Our beloved tunes are reproduced by a stack of electronics all connected with a few metres of wire. Power cables, interconnects, loudspeaker cables; you name it, there they are often in abundance yet all necessary to excite the air around us, be it the air trapped in our ear canals by a headphone or the air in our listening den. As humans, our hearing depends for the most part on the interaction between eardrum and inner ear with the air that surrounds us. Additional stimuli come from our skin and bones. All this is essential for survival. We had to hear the sabre-tooth tiger in the high grass approach, sense its direction and distance relative to us. Today the tiger might be a car or a bicyclist on a sidewalk coming upon us from behind.

As with all nice things of course, we get easily addicted and want a lot more. With a little common sense, we manage not to overdo things. We eat until satisfied, then stop. We consume sex in moderation, too. If quality matters, for everything there is the right amount and equilibrium. Now consider what we all do to satisfy our cravings for the best sounding music in our house which should trigger our dopamine-secreting glands in just the right way to cause personal satisfaction. Along the road towards better sound, most of us tweak in and around our playback gear ad infinitum. Just look at the accessories aftermarket and the amount of money spent there. When priced attractively and joined by an equally attractive sales pitch, one might just have a hit. Over the many years that we have already indulged our music appreciation, we have seen many hypes, trends and fortunately also established tweaks that actually do what they promise.

Many of these accessories attack stray vibrations, be those electromagnetic or mechanical. The subject of

today is supposed to tackle mechanical vibrations and more specifically, the influences of cable vibrations – any cable – on a complete system's sound quality. That's one of its goal. Another is to enhance the conductivity between components by improving the contact alignment of cables. Two birds with one stone so to speak.

The subject of this review is the NCF Booster with its byline "High-end Performance Connector & Cable Elevator". From this you already guessed Japan, more specifically Furutech. Only Japanese companies can possibly come up with such bylines. So let's consider the name. What is NCF? For starters, a trademark of Furutech Co. Then it's an acronym for *Nano Crystal Formula*. According to Furutech, this material can be used as an active resonance suppressor. Its microscopic crystals can be embedded in various compound materials, even plastics. The reason for embedding them are their two distinct properties. Once excited to oscillate, these crystals generate negative ions aka the piezoelectric effect. These negative ions can neutralize positive charges caused by static. The second property is that once excited, any heat generated in the energy-conversion process dissipates into the high infrared domain. Great, ain't it?



Now take a closer look at the usual hifi system and its spaghetti salad of cabling. With a rack or stand, cables of all sorts dangle happily off an RCA, XLR or power connector to be prone to rogue vibrations induced by the surrounding air, be that a passerby, open window or speakers moving air. Just consider what a subwoofer does. Other vibrations are induced by the floor. Foot fall, the jackhammer effect of mechanically active loudspeakers, neighbours, washing machines, dryers – they all send vibrations through the floor

which the poor system rack can't completely isolate unless it is an active anti-resonance platform at a very serious price like a Minus K or air-suspension Stacore model.

Most systems run at least some cables across such a mechanically reactive floor. Even though manufacturers of better cables put a lot of effort into stabilizing their geometries to avoid internal micro movements between conductors, shields and sheaths, these things do move relative to each other. And that creates an electrical current – triboelectric effect – which interacts with the actual music signal. Also, whenever signal transitions from one contact to another, there's a high chance of distortion or loss. Think oxidation, dissimilar metal junctions, physical play for high contact resistance and possible micro arcing and other issues between male and female hifi plugs. Many of those fits are poor. Power cords may wobble, their plugs be loose inside their wall or gear socket. Bananas or RCA can suffer play. Wherever there is a poor fit made worse by freely dangling cables, the connection itself is prone to rogue vibrations. To investigate potential improvements for such scenarios, Dutch Furutech distributor X-Fi sent us six boxes of the NCF Booster. In true Japanese fashion, the packaging was well thought out. Each box contained an H-shaped base unit, two connecting shafts, a support unit with matching fixer screws and a top clamp. There were also a hex driver, two silicone damper rings and two extension bars. For our review we even received additional extension shafts. The hex key is used to add an extender for increased height. Without an extender, the Booster weighs 595 grams. The H-shaped base is good for 213 grams, the bottom clamp 80 grams, the top clamp of metal with an NCF plastic inlay 303 grams. For extra stability, the metallic base with NCF plastic-coated bottom is fitted with non-skid silicone rubber. The silicone rubber rings fix the top clamp to the bottom supports.

We assessed the efficacy of the Boosters two ways. First we listened to the most current incarnation of the main system with its loudspeaker cables laid out across the wooden floor. That system were the Bastanis Sagarmatha Duo open baffle speakers with 2x18" subwoofer towers and Bastanis Epilog MkIII ribbon speaker cables. We then elevated the cables off the floor with the Boosters. Next we assessed the Boosters

while supporting the power inlet of the Trafomatic Reference One preamp [see below]; and with extra elevators, on our Audio Note Meishu.

Installing the cable elevators was simple and straightforward. Just make sure that the distance between consecutive Boosters avoids cables sagging and touching the floor. Once you have laid out a satisfactory placement, the silicone rings can be applied to fix the two clamp halves together.



Our conclusion will be short but sweet: the Boosters worked and obviously so. Especially when the space heaters are on, when humidity is low, when static is abundant and our floor boards repurposed from a previous Swedish church have shrunk, our floor does add itself to the loudspeakers' cable signal. We now know this because with the Boosters in place, the musical picture gained in overall transparency. This helped lower the listening strain even more and make long sessions more refreshing than before. There was less clutter to be listened *through*.



With the amplifiers, the setup was a little different. Comparing without and with Booster supporting the power cable at the IEC end, the combination sat on spring-loaded footers and then a passive anti-vibration board from Franck Tchong's Acoustic Systems International. However, the heavy power cable with massive Furutech carbon connectors ran across the floor to be potentially exposed to floor-born vibrations. With neither amps was the power connection perfectly solid. There was room for movement on a micro scale. Why do only XLR connectors feature a locking mechanism? Anyway, introducing the Booster on both amplifiers had a noticeable effect for the better. Again, the noise floor seemed to drop and listening become more enjoyable. Did we just get a dopamine hit?

We sure did. The effect on the speaker cables was more pronounced. The effect on the power cables was more subtle. A combination beyond the six units we had on hand would have been the most efficient but also come at a price. Are there alternatives to the NCF

Booster? Yes, of course. For just elevation off the floor, one could use styrofoam or paper coffee cups. We have seen that at shows but think it only worsens the problem. The upside-down cups become resonators to excite the cable. If they're styrofoam, they add static. Then there are the likes of Acoustic Revive's wooden supports, the Dark Field carbon-based supports and Gregitek's RG1. All are far more stable than cups but lack the adjustability thus versatility of the Furutechs. Especially the height adjustment is unique. It makes it possible to build actual cable crossings like highways when that becomes necessary; and allows for very precise strain relief of power cords, interconnects and speaker cables where they enter or exit components and wall sockets. This can improve their contact quality.

Is this kind of accessory the first thing one should turn to when upgrading a system? Not necessarily. It does depend on circumstances of course. Heavy carpeting underneath your gear (*especially* synthetic carpet) might be statically charged. In such a situation, a set of NCF Boosters seems almost mandatory right off the bat. In less static environments, a set of Boosters might become the final cherry on the sound-quality cake instead. For their results and flexibility of use, the asking price for these Furutech solutions seems fair. For a set of 10 to cover most areas of a typical system, the total cost should be equal to or less than a normal cable loom. And you get a free dopamine boost, too.

– Marja & Henk