

The Master Tape

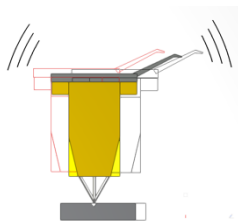


You have a “need” to upgrade. Have you wondered *why*?
 The Master Tape. Nothing sounds better and records are cut from it.
 Without realising it, it’s that Master Tape Sound you’re after!
 Given the cartridge is extracts the music, that’s the music at its the best.
 Unfortunately, your *arm* and turntable then get in the way. That’s how it all goes wrong.

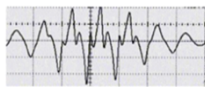
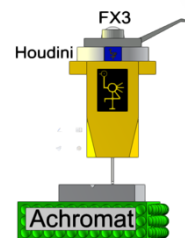
If a glass of water represents music, in 99.9% of cars, even expensive ones, it spills.
 The signal is distorted.

The superb Isolation in a Rolls Royce, however, means no water spills.

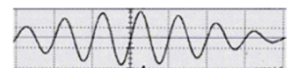
It’s “that” simple.



OR...



It’s
 your
 Choice.



Funk’s **Isolation Bubble** *isolates* the cartridge. It is the solution.

With it, new or old, €200-€50k+ you can *hear* your records approach Master Tape quality!

No one even looks at the problem this way. No one has Funk’s solutions.

With **Isolation Bubble** hear *and enjoy* your music improve.

Here are just two customer comments:

“I have the impression I’m now listening to a Master Tape”

“...I can’t say enough about the results, WOW. Well done funk firm.”

Funk’s mission statement is to get as many people enjoying this level of quality

No one understands analogue like Funk



` This document shows how to reach way beyond what you thought possible.
 PLUS: We may offer a money back guarantee but forums agree, Funk delivers!

Hi-fi+ - Innovation Awards 2021:

"If you looked up the term 'blue-sky thinking' in the Turntable Dictionary, there would be a picture of The Funk Firm – and its founder Arthur Khoubesserian – staring back at you. Whether it's the company's own turntables, its unique and innovative arms, modifications for other makers turntables or any one of a range of game-changing accessories for turntables, The Funk Firm makes products that continue to redefine what can be extracted from the grooves of a record."

The Funk Firm is a perfect example of 'leaving no stone unturned'; the company's 'Enfunkation' of a turntable means looking at every single aspect of how a record is played to extract more information at each point. With what might look like small changes, the results are truly remarkable. With decades of turntable innovation under Arthur's belt, you'd think he'd take a rest. Not a chance!"

1. "Big oak trees from little acorns grow..."

Musical textures lie in the *small* not the big – Get the small signals right, big ones *will* follow.

Think of HDTV. "The Big" we've had since tv began. HDTV improves on *smallest* of information, where textural detail lives. This principle applies equally with sound.

The cartridge: It's a highly sensitive, "mini seismograph".

With the cartridge body stationary, move the stylus and you get music.

"Keeping the body stationary"

That's the important bit. Why? *Because it also works the other way:*

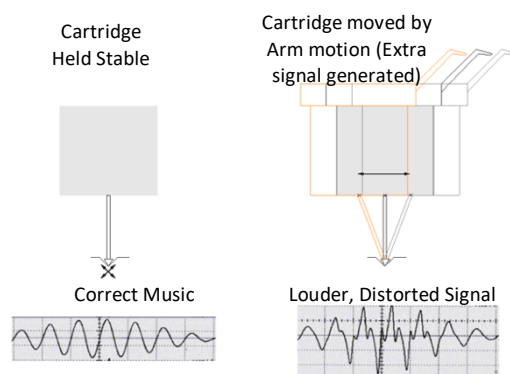
With the stylus in the groove, move the body (coils and magnets)

It generates another signal. Mix the two and the result is a sonic mess.

Turntables are the cause this of this uncontrolled mess.

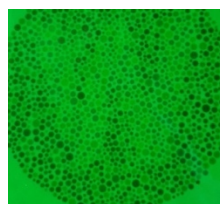
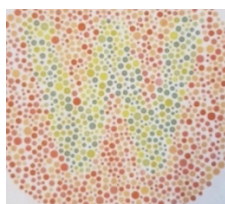
One component is the worst offender – The Arm.

Let us now provide a visual representation on our music, which is a combination of two artefacts.



The first is colouration. In audio terms it relates to an adding of sounds not found in the original signal recorded onto the Master Tape. These sounds mingle, interacting constructively and destructively with the wanted signal and reproduction loses accuracy and starts to differ, demonstrably so, from the original.

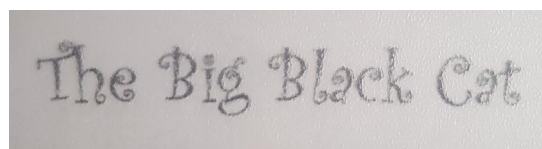
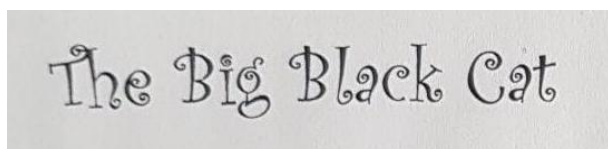
In the enclosed picture on the left is a faint green "W" within the salmon pink. This represents subtle nuances in the recording. The one on the right is overlayed with a green filter. this represents added external artefacts - arm resonances, mat reflections and so on all. The W is still visible, in other words we can still hear the message, but the masking effect on information shows how definition is lost.



In the second form of distortion, vibrations literally wobble the cartridge -try talking whilst being shaken. This loses resolution and results in unstable images, a lack of precision. Edges soften and blur into the background. As delicate signals are disrupted, space and depth perception are also lost.

This is visually represented below on the right. We still get the overall message, but the crispness has been lost.

The worst bit of all? Once these distortions get in, you'll NEVER get rid of them.



Houdini resolves the finest detail. Colourations are dealt with by FX3 and Achromat and BoIngs.

Demonstrably, these solutions are the most effective ever conceived, hence our claim that Funk approaches Master Tape quality closer than anyone else, and by a margin.

Once that has been achieved, we'll go on to address the imperfections from the cartridge using Akutrak.

Start at the beginning: A good foundation:



Vector – FX3 - Houdini

LSD and Vector.

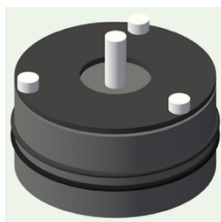
Reviewing LSD /FX3, German magazine, “Audio” measured “The lowest wow, flutter & rumble in Audio history”. Although modestly priced, such an impressive result confirms Vector / LSD or LSD / FX3 as the very best foundation. This leaves us free to apply Isolation Bubble principles. This we do by addressing the problem from the outside world in towards the stylus.

FEEDBACK - isolating the deck:

Modern turntable designs are often rigid. This means all sorts of external junk is free to enter. We don’t feel them, but our stylus (seismograph) does, insidiously generating strange signals. Yes, that’s why high-end decks are suspended.

Bo!ngs are cost-effective and easily fitted; they isolate just as effectively as any high-end deck. That’s it. Job done.

The following is just one real person’s findings does a good job at describing their effectiveness:



“The Achromat & RP6 Bo!ng arrived today...I have to say they’ve saved me a fortune! Having been relegated to a smaller room in our house (teenagers expand to fill any void) I’ve been unhappy with the performance of my KEF R100 speakers and have struggled to get them to sing as they used to in their previous location. I’ve recently upgraded the power supply to my RP6 and my phono stage to linear supplies and whilst these have improved staging, it is the Achromat and the Boings that have put the icing on the cake. Base is deeper, better controlled and the timing just sounds more musical. The KEFs are no longer chuffing from the rear port in a vain attempt to keep up. I may end up changing them in the longer term, but for now they’re back where I want them, so that’s a couple of thousand saved at least. Dance music is as energetic as it should be and Eva Cassidy sounds as melancholic as she should. I’m listening to The entry of the Gods into Valhalla from Das Rheingold as I’m typing this and cannot wait to explore more of my music. Thank you, thank you, thank you”

The “humble” Mat: Supporting your Music...We Elevate its importance to the Top Class

In the groove, the stylus accelerates at over 20,000G pile-driving vibrations into the disc.

(There is also the reaction force which causes “needle-talk”. We discuss this later.)

At a boundary change (felt/rubber/metal) they reflect, back. They reach the stylus but as it can’t distinguish between these reflections, it generates more error signals to your music - Swap mats to hear this is true. But the humble mat is the only thing touching the disc. *Only* it can absorb energy and keep it from the stylus.

The mat’s role has just elevated from “just a mat” to: *Uniquely critical*,

It can only do this if *correctly* designed...*if it mimics the disc’s characteristics*. How can felt do that? Or glass, or metal or...They all have different compositions and so none are correct, just “different” and each has a signature.

Static-free, Achromat actually matches the record, so the energy gets in. Then millions of tiny internal bubbles with tiny walls flex. This dissipates the energy. Clever stuff. You can’t dodge physics.

(Information on selecting mats from our range follows later in this document.)



2. The Dominatrix – Just listen. The arm is dominating the cartridge.

The cartridge body is firmly bolted to the arm, which is *free to move*. Stylus vibrations travel through the cartridge and reach the arm.

The arm now vibrates. Strike a tuning fork. It vibrates for some time. Why should an arm stop quickly? It doesn’t. It too carries on “for a while”, *carrying the cartridge along with it*. It’s a case of the tail wagging the dog.

“Carrying on for a while” generates our distortion signals. Analogue has no error-correction. The distortion is permanent.

You have just described 99.9% of all arms on the market. We need a good, improved arm.

When is an improvement, not an improvement?

REGA: You might have a P1 - P10...Each one “improving on the previous model”. Given they all use the *same*: felt mat, rigid feet *and an RB arm* - 3xx, 808...3000, how much can the *sound* improve between these? It’s a fair ask. As far as the arms go, given that they all use the same arm beam casting means that *essentially*, they’re the *same* arm.

Although cartridges are well-behaved, they do have wildly varying frequency responses and so they can sound wildly different. (Later we’ll see Akutrak solve this problem.)

So, when comparing decks, use the same cartridge – else you’ll always prefer the better cartridge. (Pretty obvious)

But we’re not just talking Rega. Look around at other reviews: -

Project’s “X1 Excellence”: “A fine turntable...*compromised by a mediocre arm*”. (HiFi World)

Technics’ 1500C? “...a wonderful motor...but a(*nother*!) mediocre arm”. Etc. etc.

Are we being unfair? After all, these are “budget” units. Things *should* improve at the high end. Do they?

Technics *flagship* SP10R partnered with the superbly *engineered* £5k Glanz arm: Again problems - Ortofon’s A95 *Flagship* £5k(!) cartridge wouldn’t work in it! AGAIN, it’s the arm. NOT what you’d expect from such a deck + arm.

As the music comes from the stylus, it’s battling against the arm. Let’s analyse the problem further:

Perhaps “Zero-Play Bearings” are what we need?

According to Rega (and previously Linn), “eliminating bearing play is **critical** to performance” (RB808 / 3000). They claim bearings not assembled with zero play, *apparently* results in “loss of information”. (In fact, both Rega and Linn were preceded by SME’s £5,000+ V with its tapered, damped, magnesium arm tube *plus* ABEC-7 bearings.

Each is a “reference” arm; each is *sure* to get “more information”. So why the “*apparently...*”?

“More information?” “Loss of information?” When it comes to marketing, these are really terrific strap-lines, but they do beg a question: “What does “Loss of information” mean? What does it actually *sound like*”?

Such a simple question. Any dealer *with the answer* would jump to demonstrate it. We’ve not heard of any that do.

Here’s our take: Groove Information is just two things: Vibrations (frequencies) & Hills / valleys (amplitudes / loudness).

That’s it. Nothing else.

More information? Are there *more* frequencies? Is it *louder*? Can Sinatra’s voice magically appear in a mix?

How about “Loss of information”? Do we *lose* frequencies? Does it get *quieter*? Maybe we now *lose* Sinatra’s voice?

Until *tested*, it’s speculative and not real science. Fortunately, it CAN be tested. Easily. So, why haven’t others done so?

Let’s compare RB300’s old, poor, bearings vs RB3000/808’s new, “Perfect” ones. (Later, SME’s model V)

If “New” (improved) suggests “better”, then the opposite, “Old” means “not as good”.

(We note that RB3000, has MUCH better cabling, *plus* etc. have a “new, special, coated” casting.)

It’s obvious that 3000 IS superior. It **will** get MORE information.

Things don’t look good for the RB300, do they? We should give up but we’re here now let’s compare.

The test itself is really quite straightforward:

Fit both arms (**Same cartridge!**) on one deck: - Funk’s 2-arm Super Deck Grande is ideal here. Let battle commence.

It’s that easy and a very fair demonstration. Yet we’ve never heard of any manufacturer (*or dealer!*) offering it.

That’s because the results show an old RB300 and new RB3000 sound *significantly* the *same*. (Blind comparison)

What’s *really* going on?

Bearings are designed to *spin*. In arms they don’t. Arms go up / down, just a few degrees, or swing very s-l-o-w-l-y, some 40 degrees. The bearings are point-contacts. This is like another arm design – The Uni-pivot. Here one can lift the entire arm off the bearing! The argument of “close-coupled bearings” has lost all credibility.

Perhaps “losing information” means *the whole* arm lump moves - cartridge+arm+counterweight?

Suffice to say that the energy required to do that trick is somewhat beyond all the energy generated by the miniscule, compliant stylus-in-the-groove interaction...And, by many orders of magnitude!

Close coupling then is an ‘irrelevant, *marketing* distraction. By all means buy one, but where’s the sonic benefit *to you*?

Perhaps it’s “Special Materials”?

“Super” materials (Magnesium. Titanium. Carbon). They’re great to talk about and this makes them terrific for, what? You guessed it: *marketing*. When used for arms, however, sonically, their “remarkable” properties matter little! That’s because all arms are all tubes. Tubes used for arms are typically 20-30cm long (8-12” in old money) and 1cm diameter. A tube is a tube is a tube.

Just a tube. “Tube mechanics” dominates over materials. Now we see they behave *similarly*.

Carbon, magnesium, or titanium may appear “stiff”, (we can’t see flexing), but it doesn’t mean it’s not happening. (These results apply to tapered tubes as well)

Make these tubes 1m long, like a fishing rod. The flexing in all of them is now easy to see.

Hang our tubes on threads and tap them. Like wind-chimes they’ll ring and sound similar. None are silent, their LOUDNESS, means they’re busy bending. One does not win over the other; they’re just different.

This user’s experience beautifully describes the point: (As it covers two separate categories, we’ll repeat it later.)

Actually, I sold my SL-1500C (£899) today with its Achromat (£74.50). I’ve now been using the stock rubber mat on the 1200GAE (£4,000) this afternoon and I definitely miss something(!)... My budget doesn’t allow me more spending at the moment but Houdini/Cobra (+£412) are on my mind.”

Ignoring the mat, focus on GAE (and G); each has a magnesium arm (“special material”). Poor 1500C’s is just “plain” aluminium. Where’s the sonic benefit? +£3,100 worth of improvement? Despite the “super” motor and “super” arm, the new owner mentions no improvement...(We can’t resist repeating that he missed his Achromat!! - Thank you!)

This example and his experience underpin our message:

Upgrade what you have. *You’ll get a better performance for less outlay!*

Perhaps we need “Damping”?

To control bending, wrap damping tape, apply “special” coatings. No good. The rod *still* flexes. Damping even stores energy, only to release it later. It changes the sonic character. Generally, damping doesn’t help.

Conclusion: 100 years of “progress” is in reality: NO progress.

For 100 years the arm, *meant* to hold the cartridge stationary, has failed in that task; spectacularly so. Arms literally inject distortion into your music. Permanent distortion.

A poor arm doesn’t **support** the cartridge, it **dominates** it. *A poor arm then is simply a false economy.*



Does *any* good arm exist?

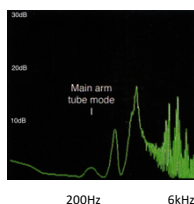
Staring at us for decades, the answer's been "ringing in our ears"

"Every action has an equal and opposite reaction". Recall "Needle-talk"? That's the "equal & opposite" *reaction* force from the stylus that vibrates the arm tube. By causing flexing we've arrived at "**RINGING**". This is *movement* and having shown the arm + cartridge is just a short fishing rod with a lump wobbling at the end, it's easy to see how it causes our seismograph to wiggle, degrading our music.

Just how bad is the situation? If we can't hear it, who cares? BUT what if we *can* hear it? Clearly, that's bad. And of course, we do hear it. In fact, people in the next room can hear it. What we mean is people in the next room can quite easily hear the improvement when an FX3 is installed. The beauty is that we can measure the differences so, let's measure.

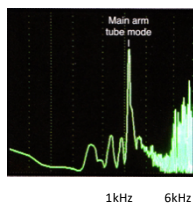
The requirement for pickup arms is they should all have a flat line frequency response. The worst case is they should be EVEN, i.e. smoothly varying. After all, amplifiers all have a flat frequency response; good loudspeaker's frequency response is typically +/- 3-4dB - Any greater and they get heavily criticised. Most cartridges are smooth and well-behaved.

With thanks to Hi-Fi World (i.e. impartial) and copied "*as is*", these arm curves show tube bending plots (100Hz-6kHz) of 3 popular arms: RB 3000 arm, SME V & carbon fibre. They are absolutely typical.



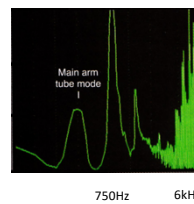
RB: 20dB
Wide Spikes

Rega's RB arms have broad spikes reaching 20dB. You'd reject any speaker with a 20dB spike (+/- 10 dB). 20dB then is massive.



SME: 30dB
Big Spike

SME V is a tapered, damped, magnesium (exotic material) tube. Its spike is narrower. Unfortunately, it's 30dB!



Carbon: 30+dB
HUGE!! Spike

What of the **Carbon arm?** Multiple peaks, one exceeding 30dB. It's so extreme that we have no comment to add.

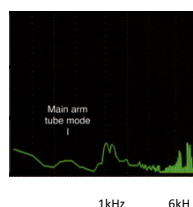
To mis-quote Nelson: "I see no ruler; no *even* line". (You were warned arms were the weakest link!) Why are they *all* so bad?

Theory: Arms are typically 9-12" length tubes. They'll all flex similarly: At 500Hz-3kHz – That's just where our ears are *most sensitive*!

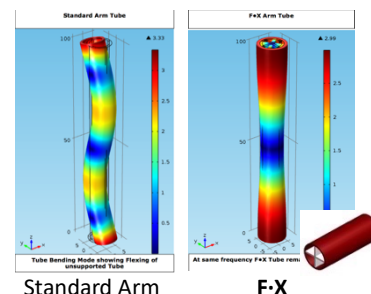
Theory has worked as predicted: The problems are all bang in the mid-range: – 500Hz-3kHz. A case of "Junk in – Junk out". These spikes are representative of the green filter in our early example. *The arm literally moves the cartridge*. That is why they are so easily heard.

Finally, **Funk's (F·X) technology and FX3**.

Seeing FX3's slender tube, you'd think it would be the worst of all. The curve below and a user's experience of FX3 tells a different story: "...the recordings all sounded incredible - without smearing". (This equates to removing the "green wash described previously")



F·X: Just +6dB



Standard Arm

F·X

Where's any *spike*? It doesn't even look like an arm response. It's delivering a totally different result.

How it works:

F·X is a complex **construction** found in Funk arms. The thin tube wall in FX3, FXR stores very little energy. An X-Brace provides incredible stiffness, just where it is needed. hence the meagre +6dB, all without the need for damping,

The modelling images on the right are in-house Proof of Concept analysis:

On the left is a Standard tube, flexing; On the Right is **F·X** – Arm beam remains straight! Demonstrating how **F·X** works.

F·X's unique arm-beam technology is found only in Funk arms. **FX5X** entry level **F·X** arm (9dB peak) then FXR, **FX3**...

New for 2022 comes **Raptor-Z**. With a peak resonance of < 1dB, **Raptor -Z**'s development is state-of-the-art. It is an inaudible reference.

Q: "Can I get away with a perfect arm and no decoupling?"

Q: "Can I decouple and use a poor arm?"

Stylus energy causes arms to resonate; decoupling is mandatory. **BUT...** Energy also arrives from the other end. This also causes arm tubes to ring like wind-chimes.

Raptor-Z addresses BOTH issues directly. (Patent pending)

A: A perfect arm holding a cartridge must be decoupled. A decoupled cartridge needs an arm as good as possible.

3. The Houdini Story...Forget Goliath, do it properly. Go challenge an entire Industry!

With Funk you can always expect the unexpected...

Houdini: Is it Heresy? Snake Oil? Leprechaun skin? (We've been accused of them all)

Or, is it genuinely the Next Step in Analogue?

Houdini (Pat). derives from my £30k statement arm, AK1, Raptor-Z's predecessor.

Houdini is my greatest invention to date, and is the foundation of my Isolation Bubble concept.



By now, you'll appreciate that Funk throws a lot of technology at you. You'd be forgiven thinking Funk is all about science. It isn't.

It's about one fanatical music-loving boy at school who was interested in physics. Upon hearing records not sounding as good as master tapes, he asked this apparently simple question: "Why don't records sound as good?" The depressing answer has been to our collective cost. For decades this industry has specialised in pseudo-scientific fog. True science is the only tool to distinguish fact from fiction.

"Hold the Cartridge Firm"

For 100 years the BIGGEST, most successful companies, Rega, Thorens, Project, Technics, SME, Linn, Audio Technica *and so on*, have all insisted: "Bolt cartridge-to-arm very *firmly*". It *seemed* the logical thing to do, and the advice was universal. Some even added a 3rd screw! (Like that's going to make the slightest difference). They are still supported by the magazines, the cognoscenti, the "experts", so they *must* all be right. Certainly, after so long, there's no way they can all be wrong. The reality, however, is it is an ideal, unreal, and unattainable. Recall: Using "reason" people (i.e. everyone) felt the earth was flat? Using science, the Greeks proved it was not.

Here's the problem: Just as in the story of the emperor's new clothes, in my innocence, *my ears told me* "something" was wrong.

I, Pink Triangle and Funk use master tapes as reference. The evidence is there for all to hear. Just listen...

What other credible reference does anyone else use?" Sorry, you CAN'T use Digital! – we explain later.

At school I looked in awe, to all these companies, the greatest "whatevers", the ones I'd put my faith in for understanding, progress, guidance, but most of all *maximum musical enjoyment*. Gradually I noted that despite ALL their money and resources, all they did was to sell the same thing, year in, year out: Same felt mat. Same AC motor. Same poor physics, (in truth, no physics I could see!)...

All I hears was the same poor sound. I was being sold. I was forced to grow up fast.

I was 15. It was a bad year for me. I took NOTHING more for granted and sadly, along with Santa, I stopped believing in them as well.

It's a fair ask: "What have other manufacturers offered you, the music loving listener, that is *new*?"

In the last 20 years, say, how much have they improved sound?" Sorry but to me it's still a case of the emperor's new clothes.

A case in point. I started Pink Triangle in 1979 and with it *my first patent*: the acrylic platter – physics told me acrylic would sound better than felt. It did. I was laughed at. Now look. A market is awash with acrylic platters! But where other manufacturers have been happy to copy and stick to acrylic, I still wasn't satisfied. I went on to *improve* on *my* acrylic with Achromat (*another patent*). Why? Why else?

Because it sounds better yet!

In 50 years why don't other manufacturers hold *any* patents *improving* turntable *sound*? Have all new ideas run out?

Certainly, patents are no game. It's not easy. They are costly. The patent office is ruthless in rejecting bad applications, so inventions must be novel to be granted – you have to be clever. How is it then that I, a single individual, hold **FOUR** patents? - Acrylic, Achromat, Houdini and Eeze-Lign. Kepler and Raptor, add another two. *My goals drive my ideas*.

Perhaps now you appreciate why I say what you've been told is all wrong. "You should decouple." Kepler and Raptor are the pinnacles.

Upon hearing the results, this is a common reaction: "*I have the impression I'm now listening to a Master Tape*"

But here's the instant consequence: If decoupling is correct, then *every single un-isolated deck in the world is compromised!* OUCH!

All Regas, Linns, Thorens, Technics, Pro-Jects, VPIs and so on. (The physics shows there's no counter-argument; they're all in trouble.)

They must now copy. If they do that, they admit I'm right. Or they must defend themselves. Here, their best moves are:

Either ignore me (don't mention Houdini or decoupling at all, which is what they are doing), or,

Attack - A deluge of objections from engineers and the audio community: "A *wobbly* mount? It can't possibly work".

When pressed, naysayers declare wobbly mounts "offends their sensibilities" and admit they've not heard or assessed Houdini.

Oh, highly scientific! The truth is it can and does work, and Funk's new Kepler with Raptor is the Proof.

But, I do get it. How can one small voice against a whole industry be right? It's made worse by brand loyalty, after all, you've put your money into these companies, you've bought their product. You WANT them to be right. If they're wrong...You are always free to choose.

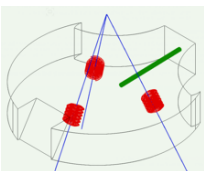
But what if I *am* correct? You, the listener, are stuck in the middle, you are left confused....and that's a problem.

Fortunately for us, science takes no sides. The rights and wrongs of all arguments are stripped bare by analysis and modelling.

Most people find science boring. Proof *demonstrating* the idea would be good. The good news is it's easy to find... Even you have it.

Using the same, (any) cartridge, (*firmly bolted, of course*), just swap arms and listen: Each new arm *changes* the sound.

Same cartridge. Different arm. Different sound. Conclusion: Proof that the arm is influencing the cartridge.



We want to hear *just* the cartridge, with no deck getting in the way. This defines our goal:

"The Record Cutter in Reverse"

Houdini's design is complex. First three miniature springs align to form a virtual anchor. Then the whole assembly is stabilised with a torsion tether. *It took two years to develop* - a whole other story.

At the end of the day, it's the results we're interested in, and they do speak for themselves.

"I thought my days of big gains were long behind me, but the Houdini blew my tiny mind" Oracle Delphi user.

It's got nothing to do with the Music...Except, it is.

If Houdini is so great, why isn't everyone jumping to broadcast this new development?

Follow the money! This is all about ££s, ££s, ££s. The money you give manufacturers *and* magazines when buying their product.

If *others* promote Houdini, they admit I am right (*they didn't come up with the idea*) The loss of face results in a loss of market share and loss of advertising revenue, i.e. what magazines rely on, the £-£-£s that makes *their* world go round.

It is as simple as that. ...But, "their" world, doesn't make it "your world". It's up to you. Make it about the music.

"...If we could only hang the cartridge in free space, we'd really hear our records..."

Funk's **Isolation Bubble** creates the total solution. It's elegant. It's logical. It works.

Unexpectedly, we discover why analogue is better than digital!

The inner, more delicate bubble around our cartridge is where magic really happens.

Achromat + Houdini. With them you'll appreciate why Master Tape is so good.

Even the best streamers don't compare. More than that, they **can't** compare...

By making that statement, we've suddenly cornered ourselves.

Modern life. "Send me a file so I can hear differences of "With and Without Houdini. I won't buy until I can hear it"

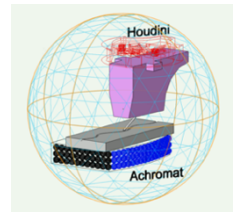
There's just one problem, and it's a good one: When we say "If we send you a file, you won't hear the difference" you'll immediately take that to mean Houdini really is bogus (snake oil...yada...yada...) and there aren't differences.

In thinking that, you'd be missing Houdini's BIGGEST strength!

Compare Houdini in a system, AND at the same time record it digitally - 24/96 should do it. Higher if you want.

When comparing live, the differences are there. The fun starts when we listen to the recorded files...

When comparing digitally, the differences vanish or, at least, are heavily diminished. It's difficult to tell them apart!



Houdini. Just what sorcery is this?

The files don't work...because they CAN'T work!

(Can you think why?)

Why attempts to show differences via digitally recorded files fail – Currently, it's an insurmountable problem.

It's 2022. Digital is now actually *40 years old*! 8-track, cassettes even CDs are being consigned to history.

But records? Despite ticks, pops, wow & colourations? Records aren't only still here, sales are increasing.

The important bit is 40 years of digital development and people keep *preferring* good analogue over digital setups. That's bonkers. Analogue shouldn't stand a chance. So, how's it even possible that analogue is still here?

Recall: "Musical Textures lie in the small, not the big"? Houdini is actually allowing the cartridge to do its thing. Consider a standard tv. Someone asks for a demo of HD tv on that *non-HD* set. You'd say: "Can't be done" Period.

That's what we have with Houdini.

Bread-and-butter work for the stylus is its ability to read the groove directly, all the way down to *molecules*.

This is defacto, *true*, low-level continuous transcription.

This feat is *beyond* digital's ability! For all of digital's "precision", very low-level signals can only be "created" by injecting noise, "dithering" – Triangular, Gaussian etc. The signal's not "real". It's trickery, a fudge.

We're NOT saying it doesn't sound good, because it really does, and without it we wouldn't have all our fancy mixing...

only, it appears the ear / brain demonstrates an unexpected ability to *distinguish between the two*.

(And it prefers the 'umble groove grinder... Ticks, pops 'n all.)

Is digital *good enough*? Listening to, and with, our ears? Apparently not.

No. We're NOT anti-digital. It's the results that speak. If we can do as well as this, then the challenge has been set.

Digital will just have to step up to the mark. It can only be good for music in general. It's certainly good for us now.

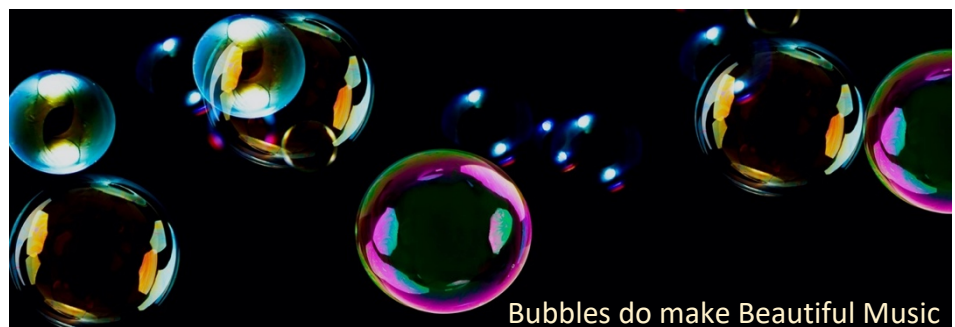
Houdini has raised the bar. Combined into Isolation Bubble, record replay is now closer to the master tape than it has ever been. and what's more, Funk has developed it for all users.

Since no other manufacturer has Isolation Bubble concepts or components for your enjoyment, no other manufacturer can claim all this, never mind deliver it. We've come full circle; you can see why we say:

"Isolation Bubble is the next step in analogue"

With stylus and hence music now freed, revisit your record collection anew.

Truthfully, that's what we're doing. We're re-discovering *our* own collections!



Bubbles do make Beautiful Music

Having shown that every turntable can benefit, we have yet more improvements and kit solutions for the many different brands and models to offer you, so read on.

4. Motors and PSUs: Doing it correctly:

The next aspect of improvements is correct motor selection and *alignment*. When Pink started back in 1979, it rejected the AC motor of the day, universally used in Linn, Rega, Lenco, Thorens, Garrard and more. Instead, it championed the use of DC motors. For years, decades in fact, it was met with derision by Linn. In 2009, mysteriously and without credit to Pink, Linn, “discovered” The DC motor. Now, more and more manufacturers are seeing the benefits.

The DC motor itself, is NOT the point. To this day turntables are still applying both AC *and* DC motors *incorrectly*.

By that we mean they are in the wrong place and in the wrong position. Once again, these effects can be heard.

(A technical white paper on turntable design describes this in detail and can be obtained separately.)

Given it is technical, for our purposes here, we shall take it as read and proceed.

Funk now has appropriately specified solutions for both sub-chassis mounted and idler drive turntables.

Suspended decks - LP12 and Thorens TD 150 / 160 etc, a new, smooth DC motor is now fitted **to the sub-chassis**. This removes outside world coupling to the sub-chassis thereby eliminating serious LF interference.

(Basically, in LP12 and Thorens decks, vibrating AC motors are fitted on the opposite side to the cartridge - you can draw a line cartridge to record spindle to motor. As the top plate vibrates, the motor moves and transmits its vibrations *via the belt* and because the arm is free to move the cartridge wiggles side-to-side, *generating LF rubbish*. Mount a smooth-running DC motor to the subchassis and now, cartridge and motor move as one. An instant improvement.)

Idler drive decks

Idler drive decks are renowned for their immediacy and impact. This first version fits L75/78, with more planned.

The motor is connected directly to the idler wheel and then to the platter. L75 / 78's AC motor buzzes – hence the big isolating bushes. It's imperative that the rotor doesn't experience *reflected* vibration. Replacing the AC motor by K-Drive's totally smooth DC motor, we now have even tighter motor-platter coupling; transients are even tighter.

Electronic speed switching allows the idler wheel is anchored to one point, avoiding the vague fit, common on L75/78.

Fitting for all the kits is straightforward and videos are in preparation to help further.

Power supplies:

Smoothie has been designed for all DC powered turntables, not just Vector, LSD and Gett! Why a power supply? It reduces the work the servo performs, allowing for a smoother drive of the platter. It is normally supplied as 12V and delivers 1A of lab standard clean, fully regulated low distortion power.

Smoothie is also available in 24V for Technics decks, thus removing the on-board transformers and associated field.

Bearings: Spin, for Pink Triangle and Technics.

Spin is very close tolerance bearing with ultra-hard jewelled running surfaces.

It lowers rumble and reduces wow.

Spin for Technics



Spin for Pink Triangle



5. Is it worth upgrading an old and/or Budget deck? - GL75, Denon, Thorens TDs, Aristons, Rega P1 / P2, Pioneer PL12D, Sansui 222, Dual and so on.

Old v New:

If we've argued the case correctly, then what Funk offers, is unique and it works, like nothing else on earth.

The dilemma: Upgrade your deck or buy a new deck - The hope is the money is better spent buying new.

Just be aware: A new deck won't, *can't* give Isolation Bubble's improvements, simply because *it doesn't have them*. – An F.X arm, Achromat, Houdini and, if it's a rigid deck, Bo!ngs. These are just a few components but they are the critical ones in transforming turntable sound.

The only way you'll get the benefits? You'll Still have to fit Isolation Bubble, spending more to get to where we believe you can be right now. If you can afford both, that's fine. If you can't then you're stuck. Your choice.

Budget decks. Is buying a better deck in the range better than upgrading? We have a user's perspective:

This is even more interesting question. The argument ought to be self-evident:

A budget deck is not as good as a higher end deck. You are encouraged to spend on a more expensive deck. As we've said, you'll still need to buy Isolation Bubble.

Now, consider this: Owners of Technics SP10Rs (expensive, great decks) are fitting Isolation Bubble (Houdini, FX3-FZ, Achromat and Bo!ngs) and are raving. What will Isolation Bubble do to *budget decks*? They can no longer be considered “budget”, suddenly they have joined the rather high-end!

The usual comment: “My deck *doesn't* justify it”, is replaced by the opposite sentiment.

Upgrading the *cheapest* decks brings the *biggest* rewards. Experience Isolation Bubble's transformations on a Rega P1, Sansui 222, and myriad other owners of modest turntables...

To repeat a user's perspective:

"...Actually, I sold my SL-1500C today with its Achromat. I've been using the stock rubber mat on the 1200GAE this afternoon and I definitely miss something... My budget doesn't allow me more spending at the moment but Houdini/Cobra are on my mind."

From entry level 1500C with Achromat, to High-End Technics, *sans* only the mat. Straight away he's not happy. Buying up the range, where's the "improvement"? Where's the benefit? You'd have saved £3100 in the process! And, that's before you add in the other Isolation Bubble components taking the performance all the way towards the Master Tape. *Plus*, these components can be transferred to: "Prettier"? "Better"? decks, when funds allow, not the other way round! Finally, you have our money back guarantee.

6. Funk's kits in practise: -

We present the two most popular ones: Rega upgrade (no Houdini) and Isolation Bubble to 1500C. They are complementary with the Rega demonstrating the importance of the arm.

We talk about Technics only because of the 6 million units out there!. **The principles apply just as easily to Pioneer PL1000S, or AT 120, or Reloop amongst others.**

More Technics info will follow but the principles and results are already present.

"The Rage 1 is funky great"

REGA:

(5mm Achromat, Bo!ng & **F•X**)

Light at the end of the tunnel...

Aug 2019 HiFi + 's Alan Sircom reviewed P3 / Rage (with FXR), comparing it to a new, upgraded P6 / **RB808**:

*"...with the **frankly shocking realisation** of just how **most arms act as a resonant obstacle** to the sound"*

He went further: **"The Funk (arm) just doesn't do that"** and further still: **"The FXR is the star of the show"** (FXR then was awarded Tonearm of the Year)

For the full review: <https://hifiplus.com/articles/the-funk-firm-rage-1-modifications-to-rega-turntables/>

For the many Planar 2 and 3 owners, our recommendation on performance is "Upgrade your Planar, or even P1/2!"

Techradar compared SME's V directly to FXR: The differences were that notable they were heard in just seconds:

*"...the V adds a distinct bloom to the sound...again smears detail... **This was a shock.**"*

FX3 (& FXR) bring a unique "Balance" to the sound". FX3 is a reference used by three reviewers.

Paul Rigby / Audiophileman also reviewed the upgrade and rated it 10/10. It was only his 9th top rating in over 400 reviews. It is now available as a video or text:

Text: <https://theaudiophileman.com/rage-1-funk-firm-review-rega-planar/>

Video: <https://www.youtube.com/watch?v=4h4qg2gcdfo>

Technics: 1500C (inc Pioneer and AT120, Reloop etc):

Text: <https://theaudiophileman.com/sl-1500c-upgrade-kit-review-funk-firm/>

Video: <https://www.youtube.com/watch?v=4h4qg2gcdfo>

A customer's experience with FX3:

Hi Arthur,

I've just installed the FX-3 tonearm on my LSD. I spent the first evening playing my favourite "hifi" albums (Talk Talk, Lloyd Cole, Blue Nile, Pink Floyd, James, Radiohead etc). It was a long evening enjoying the absence of rumble and the amazing bass slam.

The second night I played Steve McQueen by Prefab Sprout. Where it previously sounded over-produced and smeary, it sounded great. I then pulled out a selection of much loved albums that sounded worse the more I upgraded my hi fi system. I started with Magazine - Correct use of soap, which I have hardly listened to over the last 20 years as it sounds awful on my system - but this didn't sound like a muddle - everything was separated and I still had that bass slam. I then spent another 5 hours digging out other Magazine albums and then lots of other "lo fi" albums - Joy Division, Echo and the Bunnymen, Stranglers and they all sounded incredible - without smearing. It's added about 100 albums onto my listening list.

I thought the problem was that the cartridge was worn out, I even dug out my old PT turntable and suspected the output valves on the power amp, but the arm has changed everything! With hindsight it seems obvious to make an arm very light and eliminate resonance - but I never thought just changing the arm could make such a difference!

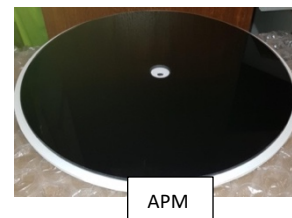
I have a busy couple of weeks ahead, discovering what my albums sound like, but that arm is a work of genius! Please sign me up for your new cartridge decoupler and alignment tool - Can't wait!

Mike - Sent from my iPhone

Choosing the correct Achromat for your deck: Technics 1500C & SL1200, Audio Technica AT120 and Pioneer PLX 1000:

Support the platter & tap it. *Feel* just how badly it rings! The "Klong" is motion *under* your stylus. Funk's new APM-1200 has a glass sub-plate that controls the motion, even *better* than 1200G. Tapping again, your fingers feel the stability Your ears will hear the improvement.

- **5mm** for: SL1200G, GAE, SP10, LP12, Pink, Thorens, Garrard 301/401 and so on. 5mm is the default choice. (For Rega add a 3mm shim to raise the arm)
- **3mm** mats have been developed for Rega arms (no VTA) + users who unable to alter VTA. Rage kit come with FX5G or FXR "Tonearm of the year" award winner FXR Both have full VTA, allowing the benefit from the 5mm mat.
- **APM-1200**: 1200, 1500C, A-T 120, etc. The glass sits inside the platter recess.



ARMS:

Using its technology, Funk has developed a range of arms at various price points to fit amongst others: Thorens – Linn – Lenco – Technics – Rega, for all of you to benefit.

7. The KITS. (Work in Progress)

Isolation Bubble is now available as various set kits that apply to specific turntables. This is a short form and full details will become available in the respective "Products" section on the website in due course.

Ariston:

RD11; RD60; RD 80; Icon: Achromat / Houdini / Motor upgrades.

Audio Technica:

AT-LP120: Bo!ngs / Lipped Achromat / Cobra / Houdini

Denon: DP: 37F; 47F; 51F; 57F; 1200; 1600; 60M: Achromat 5mm / Cobra / Houdini / Bo!ng

Empire:

Garrard: 301 / 401: 5mm mat, plus arm and Houdini as required.

JVC / Victor: JL-B44: APM / Houdini / Bo!ngs

Lenco L75 / 78:

For 40 years, Lenco's AC motor has done sterling service, Unfortunately, time and technology means that it's vibrating nature has been superseded by a new K-Drive derived DC motor spins the platter with no cogging whatsoever. Easily fitted, the speed is now selected and adjusted electronically.

An entry level arm of FX5L – it uses the existing lift mechanism. Choice of arm can then go up from there.

Achromat – Houdini completes the line-up.

Linn: LP12 and Axis: Achromat 5mm / Houdini + spacer (for Akito and Ekos arms)

For LP12, The K-Drive motor upgrade is available in two fittings that fit Keel or Majik.

A version uses the existing Radikal motor. This necessitates a new top plate and base board to allow the nearly full depth motor space to move up and down.

Luxman: 5mm mat / Houdini

Pink Triangle: PT1 / PT Too / Export / Anniversary / LPT:

Variously: Sub-chassis motor / Spin Bearing / FX3 / FZ / Achromat / Houdini / Vector Drive (Bo!ng for LPT).

Pioneer PL12D / 112D / 1150 D / 1250 / 1250S / 1550 / 30L / A-500 / 1000 / PLX 1000:

Achromat: 5mm for flat platters, Lipped for platters with a lip (PLX 1000) (APM can also be used to advantage) / Houdini, (with Cobra for decks without VTA – PL12D, say)

Rega:

P1 / P2 / P3; P3-24 / Planar 2-3 / P5 / P6 / P8 / P9 / P10 etc.

P1 is a great little turntable and benefits from replacing the stock platter with a glass one. From there, apart from the basic phono stage, treat the rest of the deck as a standard Rega:

Bo!ngs, 5mm mat. If you upgrade the arm, all Funk arms have VTA, otherwise you'll need the spacer kit. / Houdini.

Pro-Ject – Contact us as to discuss there are so many models.

Revox B795: 5mm Achromat

Sansui 222: Achromat 5mm / Cobra / Houdini / Bo!ng

Sony: PS-2410 / PS-2300A / PS-501: Cobra / Houdini / Achromat 5mm / Bo!ngs

Systemdek: Systemdek / Systemdek IIX / Systemdek Biscuit: Achromat 5mm / Houdini

Technics models:



SL-1200 / GR / G / GAE / SL-1300 / SL-1350 / SL-1400 / SL-110A / SL-1500 mk II / SL-1600 / SL-1700 / SL-1800 / SL-1900 / SL-Q212 / SL-D2 / SL-D3 / SL3300...It's a big range to cover.

Bo!ng: typically 1200; G and GAE use "Heavy"

Cobra + Houdini – All models

Achromat:

G and GAE SP10R are massive platters and flat. The standard 5mm mat applies.

1200 and GR have flimsy platters that ring. The arms have VTA and, the optimum mat is APM (7mm). The platters now compare with G / GAE, even bettering them. APM is designed for all such platters with a lip.

1500C, although lipped, has a very heavily damped platter. It sits halfway and our recommendation is to use the standard lipped mat (5mm). (If budget is no object, then APM, but this is not a common occurrence)

All other models: Using the above examples and following that Technics rubber mats are typically 5mm, then you can select the mat that fits your model, budget and aspirations.

Smoothie

Spin

Arms: FX5X, FX3 or FZ

Thorens owners:

Two DC motor options: VX and K-Drive:

TD125 owners: K-Drive / Achromat 5mm / Arm: FX3 or FZ / Houdini

TD 150 / 160 and more: Either VX or for best performance K-Drive/ Achromat 5mm / At entry level FX5T arm – it uses the existing lift mechanism. Choice of arm can then go up from there / Houdini

Yamaha:

Beyond the turntable: Akutrak. It corrects the signal and gives us a level playing field

8. Akutrak

The world's most advanced Moving Magnet Phono stage*



Having installed the Isolation Bubble, there is more work needs doing. Improve problems from the Cartridge. Amps cds & streamers all have a flat response. It's the same goal with records. *But, it has nothing to do with RIAA!* In his review of Akutrak, Sircom states the many people will feel RIAA to be sacrosanct. He's right. But, RIAA was designed merely to reduce noise and allow longer play time on a disc by reducing LF. Feed a flat signal with the correct upside down time constants and you get a flat response out. No big deal...But cartridges aren't perfect, their responses aren't flat and *there's nothing RIAA can do about that*, leaving us to "live with them".

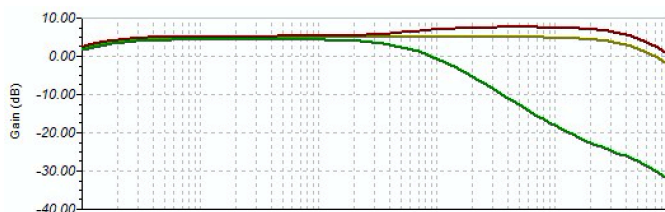
Does spending ludicrous sums on "perfect", flat response phono stages make sense? Think about it: *Input*: a non-flat response cartridge, *output* the same non-flat response, *only, louder!* Just how dumb is that?

That defines what technology is about: A problem to be solved, and with Akutrak, Funk has solved it.

With Akutrak, you get the desired flat response, with any MM cartridge.

Akutrak is a state-of-the-art, moving magnet phono-stage. Its inherent sound is: Open, delicate, musically informative, so with Akutrak, cost-effective moving magnets compete head on with moving coils*

Then Akutrak gets into its stride. It actually "reads" the load from the cartridge, processes the signal and corrects the response. Sounds incredible? Have a look at the following example of Akutrak at work:



Green: This falling response is 10 dB down at 20kHz and is very dull. Incredibly it is from a very reputable turntable manufacturer. *Many* of you reading this text will own one. This makes it an ideal, and representative candidate with which to demonstrate Akutrak's ability.

Yellow: (middle) This is the corrected response via Akutrak.

Red: (top) This shows the response can be further enhanced if so desired.

(Akutrak is not a filter or tone control. If it were, you'd have peaks / dips with different cartridges.)

To set Akutrak up? Simply turn the **Eros** knob and listen until it sounds "right". Your ears will tell you.

After all, that's why you have a hifi system, isn't it? To listen and enjoy?

(Eros: Equalising the response correctly back to how they were recorded, your records WILL sound just "Right".)

Akutrak's capability doesn't end there. **Eros** helps to *balance* the system to your room.

What of the discs that don't work in our system? We all have them, yet we enjoy the *music*.

Again, Akutrak. **Eros** moderates screeching highs *or* enhances unintelligible recordings.

Akutrak. Clever indeed. Love your music.

HiFi Plus' review concluded:

"This gives an exciting glimpse into what turntable replay can sound like and I think for many, there might be no turning back"

No one understands Analogue like funk

*Moving Coils operate differently to Moving Magnets, Akutrak's technology can't be applied there.
Another bonus: MMs are less costly than MCs so Akutrak saves you money in replacement styli.

9. Reviews and Testimonials of Houdini:

Art of Sound: Scroll down half way to find the entries: 1200G / Hana; Decca; Dynavector XVT-1

<https://theartofsound.net/forum/showthread.php?70533-Matt-The-Funk-Firm-and-Houdini-the-latest-offering-from-Funk/page23>

German Forum:

<https://www.analog-forum.de/wbboard/index.php?thread/149830-funk-firm-houdini-ein-decoupler-spielt-wie-entfesselt-ein-hörbericht/&pageNo=1>

A beautifully crafted review in Tannoyista:

<https://www.tannoyista.com/2020/11/the-funk-firm-houdini-and-achromat.html>

Stereonet:

<https://www.stereonet.co.uk/reviews/the-funk-firm-houdini-cartridge-decoupler-review>

A review in HiFi Wigwam – Houdini on three arms: RB2000; Audio Note arm and Funk's FX3

<https://www.hifiwigwam.com/forum/topic/150448-funkfirm-houdini-and-achromat/>

Testimonials:

These are worth reading individually because as we ourselves learn how Houdini works in different systems, we're discovering how different people pick up on different aspects of performance improvement of the same product.

This contrasts with most other upgrades which have only a limited effect and can thus be easily described.

As you read, it's self-evident Houdini sits outside of that.

"I thought my days of big gains were long behind me, but the Houdini blew my tiny mind" Oracle Delphi user.

"This tiny little thing is truly amazing:-) seriously the biggest upgrade of my audio equipment to date"

"I have the strong impression that the sound I am hearing is vastly superior to a live concert. This is not surprising since the recording engineer would have placed their microphones in the very best location to avoid unpleasant reflected sound and resonances. That would never be at seat level. This was particularly evident listening to Bach organ music, where I had the impression I was perched in front of the actual organ pipes, rather than seated in an echoing church.

So the benchmark has been raised yet again."

Houdini and Achromat arrived yesterday, and I couldn't resist to test them right away. Mounting my bolted Nagaoka cartridge on the threaded version of the Houdini was no problem at all.

You for sure know the outcome, I have to admit that all the promises prove true.

Especially the Houdini made huge impact on my turntable, in short: more musical and 'real sounding' of instruments and vocals, more 3D, more dynamism and liveliness, more details, more bass..., all this without any subtractions.

The Achromat was tested after having installed Houdini ... especially after having used it with the adhesives at the end (I first tested back and forth with the upgraded 'neoprene' mat which is already better than the original felt mat of Project)...Achromat strengthens / enables the positive impacts of Houdini even more.

I was expecting/hoping for a positive effect after having read the reviews, but am still shocked how big it actually is because I've thought having already a pretty good working system.

My 2 friends with turntables will not like the outcome as they have to spend some money now 😊

Thanks a lot for these great products and your much appreciated advice!!!!

"Yes. I'm surprised how this is going to change the whole game. You have thrown a big spanner in the works. Every manufacturer will be and ought to be cautious on how to move forward, given the tonearm is taken out of the equation."

"I've got to say that this is one of the most astounding upgrades I've heard. And it's less than one side into a record!!"
Now added to with the following:

Every once in a very long while, I come across a component or a tweak that surprises me in my long quest for reproducing music with Absolute Fidelity. Last week, I was sent something that took this a huge step forwards.

The first album I put on was Bert Kaempfert's Strangers in the Night - a worn out, thin, crappy pressing with mediocre sound. I was going to let it run for a bit to settle down before I fine-tuned the alignment and settings. I set the stylus down, and walked away to my office to do some work.

But I couldn't do any work. I had to come back and sit down to listen. This mediocre-sounding album just came alive. I already loved the music from my childhood, but the sound grew in dimension, clarity, and dynamics. From an album I used as background music, it became music that captivated me and brought back memories. Needless to say, I did not get any work done that day. And spun album after album - the worst sounding in my collection. Magically (may be that's why the designer calls it the Houdini), every album I put on sounded amazing. The Funk Firm Houdini will not be easy to sandbox. This is because it will sound different on every different tonearm/cartridge/turntable combination. I can even imagine that it could sound worse with some cartridge/tonearm combinations (but the price of the Houdini should preclude those combinations). For many years, I have been fighting with the problem that Houdini solves. One of the biggest problems with the record player is vibrations caused by resonances. To explain why this is so, we have to understand the analog music reproduction chain.

When musicians play and sing, the soundwaves physically vibrate the diaphragm of a microphone which turns this physical energy into electrical energy. The "electric music" then drives a cutter-head to cut a physical representation of the music into the grooves of a record. In turn, this physical groove drives the stylus of a cartridge to generate electrical energy which eventually gets converted back to soundwaves by the loudspeaker.

When the grooves of the record vibrates the diamond stylus, the vibrations travel up the cantilever to drive moving coils (or magnets) to make an electrical signal and it is this signal that is amplified. However, the vibrations don't stop there. Vibrations will travel through to the cartridge body, and from the cartridge up to the tonearm, and down to the structure of the record player itself.

All those vibrations cause resonance in the tonearm tube, can be reflected back to the cartridge by the tonearm bearings, and will be picked up again in the coils of the cartridge. To minimize this reflected and non-musical vibrations I've been obsessively tweaking the cartridge/tonearm interface with blobs of Bluetack to try to dampen arm-tube resonance, precise adjustment of the torque on cartridge screws to adjust the interface, and even little espresso cups of water on the arm-board.

The Houdini makes all this unnecessary, and when you hear the difference, it is a revelation. Unfortunately, it now means that I'm going to have to obsessively tweak the resonances on the cartridge body itself

Disclaimer - the designer Arthur Khoubesserian sent me two of these to try. I've asked for a bill as I'm keeping both, (Gary Koh: Genesis Loudspeakers)

Hi Arthur,

after a few hours of enjoying music I honestly can say that I love your Houdini 🥰

It improved my system in a way that no other component was able to do (and I invested a lot ...) It didn't change the tonal character of my system in any way, but it purified the tones. Much lower sound floor, much more details, much more timbre and character in voices and instruments. The bass is "detoxified" from disturbing resonances, therefore more precise and a little bit leaner sounding. But the best the Houdini does is the unbelievable 3D staging. It's like being live in the concert hall. The instruments are clearly separated with much air between them. A very new level of my system 👍. It made a big step forward from hifi to live music, which makes me enjoy music more than ever. Thank you 🙏😊

Invoice please!

Regards

Christoph

Dear Sir,

You are a genius!

Halfway through my first album since the veil was lifted.

I cannot believe how good this is.

Thanks again, Gary.

Arthur,

I would not have believed this kind of sound reproduction was possible. This is an utterly amazing product.

I agree with everything you say on your website about the improvements. The sense of actually being present in the recording venue is overwhelming.

I remember the Hi-Fi choice review of the Pink Triangle Anniversary "Possibly the most detailed, clear and neutral deck around. Likeness to master tape is uncanny".

"Detailed, clear and neutral" do not do justice to the Houdini. I think the recording engineers of the 60s and 70s will be smiling in their graves at how this brings their work to life. This is the sound they must always have wanted, and it's not just neutral, it's vibrant, it's emotional and it's fun, just like being there (only better sound quality!)

I am definitely keeping it.

Best wishes, Keep well and many thanks,

Patrick

Hi Arthur

Now playing the first side of Simon and Garfunkels greatest hits.... OMG

Individual instruments..

Voices like I've never heard them before.
Clarity
Fast punchy clean bass
Headroom (as I call it)
It's like I'm there
And best of all the wife can hear the difference too.
Thank you
Kev

"This arrived today...spent some time earlier fitting it...I can't say enough about the results, WOW. Well done funk firm."

Reviewer: (VPI Prime)

"It's now attached to a Hana ML. My word! To be fair I was expecting an incremental change, but I seem to be getting more of everything while cutting out the VPI Prime. I actually found myself turning the volume up – not because I couldn't hear properly, but because I could without fear of nasty little artefacts becoming audible."

Saffire / FXR: "I don't have time to go into it right now, but f*** me that isolator is unbelievable, biggest improvement I've ever heard with any upgrade. It's better EVERYWHERE

I put some seriously complicated stuff on and handled it with joy and shows what the speakers can really do (*this guy listens to a lot of Trash. He's using a pair of Curvis with BMR driver and a couple of REL subs. Never been to his room but I'm told it's not small.*)

I was expecting improvements but minor, given that I'm running the FXR, but it was huge.

If I'd spent thousands on a new arm I'd have been happy.

What I'd said to Matt...Amazing. Thanks."

Tarantella / FXR: (This guy has 2,000 albums, AR amp, Proac Response 2. Felt he wanted to replace the speakers)

"Just had my first quick listen. The Houdini is quite something.; I'm very impressed. Before, I thought the Kontrapunkt B was a bit weedy, but it seems to have grown a pair...

There's definitely more space for individual instruments to breathe, separation/ depth improved, soundstage better balanced. I don't think I'll need new speakers!! Result."

Acoustic Solid: From an International dealer: "He was kind of in a shock (positive) regarding *loss of distortion*.

Describing the Denon 103 a beast with a very stiff cantilever, it transfers all the resonance to the arm causing massive distortion. He has twice returned "The Magnificent Thad Jones" album to the seller, thinking that the record is faulty, until he realised that it was Denon not being able to play or let's say not compatible with AN arm. A deeper soundstage, more air around instruments and more + tighter bass were his comments. But again, his main shock: The lack of distortion. He says that *this device makes the cartridge-arm matching problem... "history"*.

"Only in the past few days could I say what the diamond profile is doing. Refinement is sublime"

Rega P3: "This is amazing. Really. How is my music now filling all the air in my room. I keep wanting to see what the next record sounds like but can't – I can't move to take this one off..."

From a dealer:

Well what can I say. I've heard things on the Carpenters Hits I didn't know were there - reverb on Karens voice, Layers of sounds so easy to hear, etc.

Using a Lyra Argo (old) on the FX3 you sent with the Houdini. Going to try on better system downstairs when I get chance. But seriously impressed.

Just thought I would let you know. The others have'nt heard it yet.....

And: ...Jon has heard it now with Grace Jones Pull up to the bumper track. The traffic sounds like it's in the room - and although played loud does not sound harsh or edgy with a holographic sound stage. He was blown away!

Andrew

Just a quick update on the Houdini which was received on Saturday. I don't know how you do it but it is truly amazing! I can't believe the difference it has made. My whole system sounds like it has had major upgrades.

One very happy customer here.

Darren.

Bonjour Monsieur Arthur

Pardonnez-moi mon anglais mais....."Wow f####ing Wow!!!"

The H is amazing and as I have said already, you are an audio magician!

Yes please - I'll keep it. Please send me payment stuff. The result is a hugely different and better sound. We tested it on "The Concert in San Francisco" after some Baduism for a female vocal test - just gorgeous.

Thank you

Yours, R