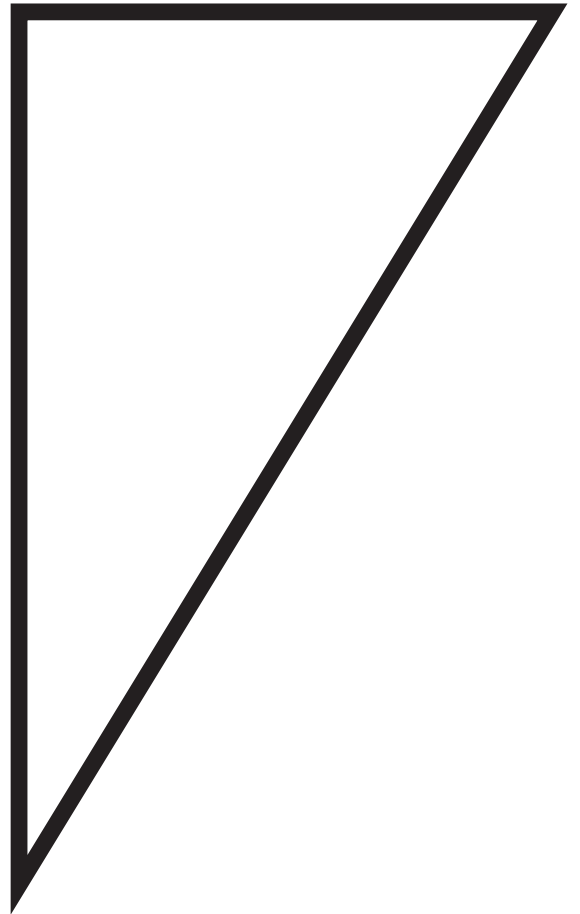


47 Laboratory



Only the simplest
can
accomodate
the most complex

The Days -of- 47

come back, silicon, all is forgiven.

Review by Herb Reichert

Consider yourself a hapless duffer---and if you don't want to be a hapless duffer, too bad: It's a cosmological imperative.

Now ask yourself: What forces could cause a string of black boxes and the wires that join them to hold such power over our attention? We're committed to them, and to reading about them on the toilet, in bed, riding the train, or waiting at the doctor's office. That's the hapless part.

Lord, what ever happened to Colette, Henry Miller, or the Bard? What about sex and society? What could these inanimate things possibly do to excite us or redeem us enough to warrant our idolatry? Expand our consciousness? Alleviate depression? Develop our personality and make us more interesting? Zap us to another place? Spawn a mood change?

We should jump up and shout Hallelujah to find a black metal anything that even tries. And if, miracle of miracles, we find a tin box that pulls off some of those tricks---and if it has some degree of cool factor going for it, too---then we should forget sex, temperance, and social injustice and just buy it, assuming we can afford it. (The question of value is an endless bummer: Just when we get all wound up, it steals our fun and stifles our romance. But the voices in our heads are into it. Therefore, I must talk about both the life-changing possibilities and the relative value of music-making metal boxes.)

So if these tin-cans-with-bits are going to be interesting enough to write about and read about, they'd better be either exotic as hell or nearly free. And we are off to a good start, because this is about a bunch of very small and nearly empty metal boxes from a company in Japan called 47Laboratory: definitely no free, but they are exotic, and they do in fact perform several of the above-mentioned tricks.

47Laboratory was created in 1992 to manufacture the designs of Junji Kimura. Back in the 1960s, Kimura designed speaker drive units, a record player, a tone arm, and several amplifiers for Pioneer. He went on to work for Kenwood, Luxman, and Kyocera---and it was working for the latter company that Kimura began to meditate on the broader picture of audio design, especially as regards the audible effects of enclosure design and component layout and mounting.

Then, beginning in 1992, Kimura's interest turned to some ideas which first saw light in MJ(Audio Technology), the Japanese audio builders' magazine: radical innovations of Japan's lone experimenters and devoted audio cults. When Kimura retired from Kyocera and started 47Labs that year, he became one of those lone-wolf experimenters. The ensuing six years of research produced a genuinely radical design: easily the smallest, most solidly built, and most musically effective solid-state amplifier through which I've ever played music.

Now promise you won't laugh when I explain that all of Kimura's research boils down to this: "Only the simplest can accommodate the most complex." To this end, the model 4706 Gaincard amplifier and accompanying model 4700 Power Humpty power supply are made with the fewest components possible, housed in the smallest chassis possible. The 4706 Gaincard measures 6.8 inches by 1.6 inches by 4 inches (WxHxD), and that's for both channels: In essence, the 4706 is two 25-watt monoblock amplifiers tied together by a half-inch-thick aluminum face-plate and another half-inch-thick plate on the rear, the latter with an acrylic mounting block to support the loudspeaker terminals.

Each mono Gaincard has only nine components, which are all hardwired and bolted to an extruded aluminum chassis. The signal path is an inch and a quarter long. The negative feedback loop is only a third of an inch long. The whole stereo amp weighs less than a pound. How cool is this? You could drop this thing from an airplane or run it over with your car and it would still work fine. By comparison, the average Royalist-Imperialist amplifier uses over 300 parts, breaks if you look at it funny, and still requires at least two fit manservants for transport purposes.

While most of us have been shuffling about, speculating about the futures of various digital formats, the audio engineering underground has been experimenting with the mechanical and electromagnetic effects of audio component environments---i.e., the black box. One theory is that the audio signal is really an electromagnetic "shock wave" which is impressed, instantaneously, upon the entire audio playback chain, boxes and all---from laser light to the pressurized listening room air. Thus the final quality of reproduction is shaped by the combined resonant and reactive nature of the entire playback system in the home environment. Substudies of this theory include orientation and mounting of com-

ponents within the box; the box as a source of free ions and carrier of electrical charge; the environment of the box relative to the scale of the electromagnetic fields generated during operation; and the effects of mechanical damping and box resonance. From an audio design standpoint, all this is the equivalent of Einstein's theories: some simple and shockingly obvious looks at The Big Picture.

Remember, every material and component upon which the music signal is impressed, including the box itself, stores and releases energy in a unique non-linear and frequency-dependent manner. This kind of distortion rarely shows up on any steady-state analysis, but it's nonetheless real. Turntable platter mats are a good example: If you play an LP on various mats of identical thickness but different materials (felt, rubber, cork, glass, or whatever) you'll find that tonal character, spectral balance (harmonically related energy distribution), rhythm clues, and surface noise will be noticeably different with each. So the idea is not new, but applying it to the mounting and layout of active and passive electronic parts pretty much is.

The Model 4706 Gaincard amplifier costs \$1250, but you'll have to spend more than that to get up and running. That's where the Model 4700 Power Humpty comes in. This outboard power supply is unusual in that it has a high-capacity transformer (170VA), but sees only a very small filter capacitor (a 1000 μ F cap mounted in the Gaincard itself -- one of those nine parts). Distributor Yoshimitsu Segoshi suggests that this makes the amp quicker and more supple, and more able to capture subtle details and note attacks. The Humpty is built in a dense aluminum can measuring just under 8 inches long with a diameter of about 5 inches, and connected via a length of soft wire to the Gaincard. The Gaincard can be used with either stereo or mono Humpties.

Other details: The Gaincard has 27dB of gain, and an input impedance of 20K ohms. That's just enough for most CD players to be connected directly, eliminating the need for a separate preamplifier. To this end, each amplifier channel is equipped with a stepped attenuator and a tiny mute switch---and in that sense, the Gaincard is an integrated amplifier, albeit one without any kind of source-switching. The speaker binding posts are small Phillips-head screws, which will accommodate only 20-gauge or smaller bare wire.

Before I describe the life-changing possibilities of the 47Laboratory Gaincard, there is something you must understand. In order for an audio system to make a great musical impression and stimulate a further appreciation of the musical arts, several things must come together: the artistic sensibilities of the musicians who make the music; the imagination of the designers who create the boxes that reproduce it; and the cultivated tastes of the duffers who experience it.

I don't give a rat's tootie how many looks of love the Rebecca Crawl Trio gives you or how many trumpets are in the corner of the sound stage: Getting greatness out of a system depends on putting greatness in, and if you choose a record or disc for the way it sounds, that's all you'll ever get: sound. But not music. Remember audio's first law: Black boxes can have no tangible value beyond the musical taste and the artistic sensibility we bring to them. There is no objective measurement or meaningful comparison I can present outside of my experiences with the musical program. For me to discover some recommendable value in a audio system, I must first find an identifiable correspondence between my reactions to the music I played and the gear I used: Did this or that group of components enhance or disable my contact with or enjoyment of the music? My job as a writer for Listener is to then speculate on the chances of your being able to repeat this correspondence in your home. (That latter part is very difficult.)

I began this trial by substituting the Model 4706 Gaincard in my affordable/enjoyable "Bohemian" system, which consists of a Creek 4330 integrated amp and a pair of Acoustic Research M1 loudspeakers, using an Audio Note CD3 CD player as my source. Immediately, the Gaincard made the music seem richer and more tactile, with new details popping out all over---but stop right there. I never thought music could sound this dry and cold, like the first time I ever touched a dead person. It was that scary.

In my experience, there is no such thing as a "neutral" or "analytical" hi-fi. All groupings of audio components superimpose (resonate) their own personalities on the musical fabric. Quality in hi-fi is mainly a question of personality, character, and style. I like audio that is loyal to the artist's intent: fundamentally truthful. And if it has charm and a warm, wet, well-proportioned body, then I'm ready to listen to what it has to say. By this token, the Ongaku is Marilyn Monroe, while Creek 4330 reminds me of that helpful neighbor you can trust with your house keys while you're away on vacation. For any amplifier to be worth more than the 4330's modest cost, that amplifier must present music with more noble proportions and a suave, sexy glamour that won't depreciate with age.

The next morning I discovered that the Model 4706 in fact has that sexy glamour. I swear to you, I have never experienced an amp that could change character this much in only 24 hours. I have no explanation, but the first disc I played while I drank my morning coffee sounded completely warm and

seductive. I was amazed. From that moment forward, I have enjoyed every disc I have played with the Gaincard in the system.

When I substituted the \$15K Avantgarde Duo loudspeakers for the \$150 M1s and put on "Light as a Breeze" from Leonard Cohen's *The Future*, I was struck dumb. Only the Ongaku has showcased the dark laws of passion inherent to Leonard's poetry more than the Gaincard----"I was healed/and my heart was at ease." With just the CD3, the Gaincard (with one Power Humpty), and the blue Duos, I felt like the music was all there. Every CD demonstrated a glowing sense of musical completeness; what little was missing, what still might sit undiscovered on these silver discs, was of questionable importance. Sure, I can still imagine more resplendent playback and I'm sure I have experienced such. But my point is; I felt like I was getting more than I needed. I wasn't just satisfied, I was grateful and amazed. Total system cost: \$20K.

When I added the new Kimura-designed transport (no model number yet); the Model 4705 Progression d-to-a converter (20 parts total, no oversampling, no digital filter, no analog filter, 1.4-inch signal path!); and the Model 4799 Power Dumpty to the system, the feeling of completeness expanded. Now this grand sense of wholeness carries the bass with it----bass that supports the entire musical structure. To me, digital has always seemed more scattered and broken, more "taken apart" than analog. With the 47Laboratory CD front end, the music moves as one full unit, completely reassembled and driven by the beat. Solo piano recordings now sound like the music comes from the whole instrument, accompanied by a new, finely detailed, LSD-spiderweb presentation of voicings and textures. On my two finest examples of psychedelic trance music----*Twisted* by Dementertainment and *Are you Shponged?* by Shpongle----moments of structural folding and rhythmic implosion became wonderful, impossible-to-miss events.

The Progression converter and new transport are consistently an enhancement over the Audio Note CD3 player on all types of music, except for an unmistakable loss of what I call "bloom"----an expansive, reverberant quality (found mostly in tube electronics with no negative feedback) that envelopes the music's harmonic structure with a glowing, fluorescent space. While excessive bloom dulls the music, some little bit of it is effective in reducing listener fatigue and making the melodies come alive. Digital reproduction via the Progression is in no way fatiguing, but there are moments when this loss of tonal radiance is distracting, making me wish for a bit more sense of overtone or warm, moist atmosphere.

The combination of the Progression d-to-a converter and Kimura transport recovers more of what (I suspect) is encoded on my CDs than anything I have used, at a cost of about \$8K for the complete digital source (like the name, the exact price of the transport hadn't been determined by press time). Not free----but certainly a reasonable amount for what might be the most competent CD front end, period. I should emphasize that while the Duo/Gaincard/Progression system was the most full-information playback system I have ever used, I still had one important unfulfilled desire: Make my perfect rose just a bit more intensely fragrant.

The 25-watt Gaincard amplifier will outplay the Krells and Levinsons, it will reveal more of the poetry and structure of musical art than any silicon-based amplifier I have experienced, and it has plenty of cool factor. It seems able to drive a wide range of loudspeakers, and at \$2750 complete (with one Power Humpty) this must be considered an excellent value.

Adding the second Power Humpty and the 4705 Progression d-to-a may also be a wise notion if you don't really need that bloom and you're not a Bohemian or a starvin' Marvin. But I would really like to know how the same nine components and the Humpty would perform if they were jammed in one used tuna can and one small soup can. I am serious. What if the next step in Junji's research were to discover how much musical integrity he could retain while minimizing the costly packaging? Could he also make a 25-watt amp that sounds two-thirds as good for one-fourth the price? Could he beat the honest Creek 4330 at its own game? If he could, I think a lot of duffers like me would feel a lot less hapless.

Artie comments: After collecting the review samples from Herb, Yoshimitsu Segoshi sent the 47Laboratory amp and a couple of Humpties my way, along with a phono preamp called the Model 4712 Phonocube (\$1750----and it wants one of those Humpties for itself).

I'm really knocked out by this stuff. Used as an integrated amp with my Lowther PM2A/Medallion loudspeakers, the Gaincard is lively, punchy, and endlessly fun. It isn't as psychedelic as a Fi 2A3, and it's crisper and less liquid than either a 3A3 or a 300B. But it isn't at all fatiguing, and neither is it boring. Hell, boring is the last thing you could say about the Gaincard. Heard through it, music has tremendous presence, rightness, and immediacy. This is serious hi-fi----by which I mean serious fun!

The dual volume controls are a bit of a pain: On more than one occasion, I've wished for finer gradations of loudness, for settings between the ones supplied. But that may be because the Lowthers are so efficient, and are making so much of the Gaincard's gain. (Before we went to press, I mentioned this to Segoshi, and he explained that 47Laboratory can custom-tailor the Gaincard's volume attenuation; for units already in the field, this mod costs \$120 plus shipping to Sakura Systems, and takes a couple of weeks.)

A note on the name: As Herb mentioned, the man behind 47Laboratory is Junji Kimura. In Japanese, ki means yellow, and mura means purple. And on the color wheel, yellow corresponds with the number 4, and purple with the number 7. There you go: 47.

Even if you didn't know that, you could still tell that Junji Kimura has a sharp sense of fun: all you'd have to do is listen to his amplifier----which I recommend you do when the opportunity presents itself. (New Yorkers have it easy, but by the time you read this, dealers in other parts of the US may have signed on.) If you thought you'd heard it all before, you'll be happily proven wrong.

Listener, volume 5, number 2 (spring 1999)

**** About the same time Herb was reviewing the system, 47Laboratory performed an additional fine tuning to PROGRESSION DA Converter. What they did was a minor mechanical tuning on the casing of the unit, but the result is far from minor. The new PROGRESSION now is fuller, richer, even more open sounding than what was already amazing former unit.***

MEETING THE JAPANESE MASTER JUNJI KIMURA: 47 LABS

by Harvey "Gizmo" Rosenberg

THE THREADS OF OUR SOUL

The American Indians use the expression, but it is also one of the oldest expression..."our life is a blanket created of many threads...there are dark and bright threads, yet the more multi-colored threads we weave into it, the more interesting pattern", so I remind all of my brothers of how many of those glorious threads are woven into our lives, and became permanent elements of our soul, because of our hands...what we have felt with our hands and what our hands have crafted. From page 150 of my book, *The Search for Musical Ecstasy*, is this poem by D.H. Lawrence:

Things men have made with wakened hands, and put soft life into are awake through the years with transferred touch, and go on glowing for long years.

And for this reason, some old things are lovely warm still with life of forgotten men who made them

I remember the moment well, as if it were just yesterday. This, one of the brightest threads in my blanket, is still alive, shimmering in my hands. I remember the moment I first touched a bare female breast. It was very small, and it was perfect and it was fifteen years old and it belonged to my girlfriend, and the moment I touched it on the night of my junior prom my hand caught fire...I mean it felt like it was burning as if it was struck my lightning. It was a night in 1957 I will never forget. I wondered then how it was possible that by simply touching something my life could be changed forever, and didn't ever want to wash my hand. I am sure you have all had the same experience.

All of my brothers have been transformed by touch..the touch of their baseball glove, their bicycle, a favorite toy...things are filled with life, which is why we love touching beautiful audio gear or an old Japanese bowl, or an 1873 Winchester.

When I unpacked the box that was delivered by the jolly Fed Ex man in the dark blue Bermuda shorts and funny looking knees, and held the very small black box packed within in my hand (6x4x1.5... inches, not feet...it is the size of a Sony Walkman), I had one of those mysterious moments of touch. Even before I listened to this absurdly small 25 watt per channel solid state amplifier it was talking to me. I instantly knew, from the wisdom of my hands, that this was not going to be a normal audio speculation, but that this tiny totem of Japanese audio artistry was a key that would open the door to a new dimension of my imagination, and I was right. As you will discover latter on, it delivered a powerful spiritual challenge to me. I don't know why when I touch the art of Japanese audio masters I hear voices that command me; voices that I willingly obey. Is it my brain damage, or can things posses and express the soul of the artists, Michaelangelo?

I remember the night about five years ago well. I was talking to John Curl, (who was complaining about mechanical problems with his Porsche) the man, who as designer for Mark Levinson, created the transistor amplifier revolution. I asked John why no one had designed an ultra-refined very low powered solid state amplifier; one that was a solid state analog of our beloved ultra simple single-ended triodes. John reminded me that his first design for Mark was only 20 watts...but it was also huge and complicated, and I kept on hitting on John about simplicity. He agreed that LESS IS MORE but that was not what American solid state amplifier culture is all about...it is all about power, more power, and more power, and I remind you of the recent cover of *Stereophile* that boasted about the new Boulder amplifier.."1,000 WATTS".

So it is only natural that Americans would think that solid state amplifiers must be huge, powerful, and complicated.

Now don't get me wrong, as Guildmeister of the Triode Guild, I am not recommending that my brothers give up their tubes, but let's face it there are many of our brothers who prefer the flavor and aroma of solid state sound, and the reason I was speculating with John was that I wanted these music lovers to have the best of what they love. Should Harley-Davidson riders have the best possible bikes, and shouldn't the riders of Honda's (in spite of their spiritual errors) have the best bike possible? Who am I to judge another man's passion...well.... almost?

So it did not surprise me that 47 Labs solid state amplifier is in America, from Japan...the audio culture that embraces...LESS IS MORE, MORE THAN ANY OTHER CULTURE. This tiny amplifier, as far as I am concerned, is the amplifier that will cause the same revolution in Solid Stateville USA as single-ended amplifiers caused in Tubeville USA, and the revolution is coming to us again by way of a Japanese master, Junji Kimura. (Jogulation Alert: the speaker cables that came with this amplifier are single strands of 22 gauge solid copper...which I recommended you experiment with three years ago).

This tiny amplifier is the pebble falling into the solid state lake whose rings will soon be as wide as your imagination. Again, I remind you that the art of audio design in this island country is directly connected to an eight hundred year tradition of craftsmanship which produced the Samurai sword, Haiku and those ferociously beautiful lacquer boxes

My writing about Nobu Shishido expressed my admiration for the tribe of Japanese audiomaniacs who dedicate themselves to shredding the perimeter of musical beauty, and their audacious spirit, their restlessness, and their ability to simultaneously embrace and transform their artistic traditions. This is where artistry and John Wayne type guts (or should I say Ninja?) comfortably co-exists. This little black device is one of the great works of artistic bravery I have ever encountered...this master has balls, which compels me to now pause and discuss a subject which can only be understood by ego and sexually secure men.

DOES SIZE MATTER?

On my way to Art Dudley's, publisher of Listener Magazine's annual barbecue, I drove with Yoshi Segoshi, the importer of the 47 Labs equipment, who is familiar with both the American and Japanese audiomaniac culture, because he is both an American and Japanese audiomaniac, which is very rare indeed. This man combines the best of both cultures, and we need about 127,843 more of him in America.

While we were driving through the luscious green valleys of the Catskills mountains, their patchwork of bright green fields swaying heavy with corn, trimmed with Sunflowers, I discovered that Junji Kimura, is in the truest sense of the word a revolutionary artist, and it is impossible to separate art from culture and that means it is impossible to separate his art from his politics. Junji is a revolutionary in that he is designing audio equipment for men who are sexually secure; a man who is sensually alive and subtle; the man who, in the best tradition of Japanese arts, knows that his sexual energy must flow like water smoothly around the rocks; bright, subtle, clear, mysterious. What kind of man uses those gigantic hulking solid state amplifiers which never achieve subtly of tone, whose great claim is their pure brutish power? Why would a man need such gigantic hulks in their living rooms? You guessed it...and I am taking the liberty to be creative in my translation...and admit that I too once created amplifiers for this customer...and this may be a new law of audio existence: amplifier size is inverse to penis size. Men who own those gigantic solid state amplifiers have small penises...actually or metaphorically, and men who use small amplifiers have large penises either actually or metaphorically. When we size up this matter, I believe what Kimura is telling us, is that sexually secure men, men who are confident about their sensuality do not need those Goliaths of solid state power.

Junji Kimura only designs audio gear for sexually secure men.

This may also explain why low powered triode amplifiers, amplifiers between 3 and 9 watts are becoming so popular...again...in America, because more of us are becoming sexually secure, taking Viagra or...is it possible that our penises are growing? You know where to email me with your insights.

BACK TO THE FUTURE

When I received an email from Yoshi requesting my appraisal of Kimura's art, I was already aware of the high praise that Herb Reichert had given both his amplifier and DAC in Listener Magazine so I knew I was being requested to listen to an amplifier by another Japanese master. Yoshi also told me that Peter Breuninger was auditioning the amplifier. My affection for young Peter is well known, but I secretly wondered if he had the artistic sophistication to grapple with this Black Badge of Courage, because Peter had not yet danced on red hot coals, and been through three divorces. Yoshi was obviously reaching out to triodemaniacs to evaluate his amplifier and I think this is good audio Ninja cunning, because (1) only we possess the musical sensitivity, intelligence and imagination to appreciate such a refined device and (2) I can imagine how this will cause those who own those solid state boat anchors to get a twitch, and need a rubber bed sheet, and most importantly (3) it is well know that triodemaniacs are the most sexually secure men in the American audiomaniac tribe.

This remarkable beautiful black small container, contains the soul of Junji, and he is a dangerous dude, shaking, rattling and rolling the orthodoxy of solid state design, Junji is exactly 180 degrees out of phase with Mark Levinson, and Krell. His art bears no resemblance to any solid state amplifier I have ever seen, or heard, or, you have ever heard or experienced. Two channels of 25 watt mono amplifiers which measure about 6 1/2 x 3 3/4 x 1 3/4 inches (not feet) weighs about one pound, and are connected to mono cylindrical power supplies, and.... they have IC chips in each channel. So how could I, the Guildmeister of the Triode Guild take them seriously, and how do they compare to my DHT amps? Are they a real threat to the Big Boys of Solid State Mountains?

BUT FIRST SOME GOOD BASIC ADVICE TO ALL MUSIC MANIAC

This is obvious: experience the widest possible range of music because it will broaden your imagination and...who knows what new exotic tastes you will discover? Chamber music fiends should check out the latest rap music and rap fiends should check out the latest recordings of the Manhattan String Quartet.

This is why you all must experience this dangerous, revolutionary amplifier that was designed for sexually secure men. Even if you are a die-hard tube maniac like myself, this will be a thrilling experience, because anytime we encounter the work of a master we are thrilled, we are strengthened and we are connected.

CAVEAT EMPTOR TANNOY

Junji's micro amplifier is the second most powerful amplifier I have auditioned in the last year, and 25 watts of power will literally blow down the house I live in with my hot rodded Tannoy horns. Yoshi who has heard the stock Tannoy Westminster Royals many times in Japan was blown away when he heard these highly modified speakers in my living room, and commented that he had never knew that the Tannoys could be so dynamic and clear. He is describing the benefits of my hotrodding, and why these are the perfect speakers for probing deeply into Junji's soul.

My caveat to you all is that I can only describe my experience of this amplifier on my speakers, which reveals, I believe, their ultimate quality. Speakers of lower quality may not reveal the full measure of their amazing grace...for a solid state amplifier.

Now I want you all to sit back and put on your safety belts while I give you the words that will appear in neon lights on the billboard in Time Square:

Dr. Gizmo, Guildmeister of the Triode Guild, America's most beloved thermionic techno-shaman says..." If I had to pick one solid state amp to listen to, Junji Kimura's 47 Lab's revolutionary micro-amp would be the one".

Do I need to say more? Yes. There is still a big difference between this amp and my favorite DHT amps, but this little mother is as close to the sound I love in tube amps in a solid state form as I have ever experience and has a harmonic authenticity and coherence (without the broken glass shards penetrating my ears) that is almost completely absent in all other solid state amplifiers. This is the first solid state amplifier that has the right aroma and flavor and I would feel comfortable eating. Simplicity of design is the key to this amazing achievement.

And it pisses me off, and makes me jealous. Why shouldn't I be honest? I am human and any time I encounter such creative brilliance, I feel jealousy and I am proud to admit it, because now I am thinking about other areas of tube circuit design I would like to explore...that is how deeply I am affected my Junji's circuit...as will you.

translation by Yoshi and Irene Segoshi

Everything You Know Is Wrong or I Was Fooled by Mainstream Audio Gurus

by Steven R. Rochlin

Most of us have heard this before. Class A amplifiers are the best for music reproduction. Or how about single-ended tubes sound good because of all that second harmonic distortion. Oh, then there is the one about how speakers must be placed in cabinets so solid a nuclear warhead can't destroy 'em. Wait, i got another one. All amplifiers sound the same (said the newsgroup Borgs). Resistance is futile! Of course the best amplifiers are those newfangled 1.21 jigawatt high efficiency Class D digital amplifiers, right? Did i forget to mention that with amplifiers the bigger the better?

"The more you know the less you understand"

-- Tao Te Ching

Just when i feel a good understanding about audio something like the 47 Laboratories Gaincard comes along and destroys it. How stupid could i have been? A reviewer in this industry must have extreme honesty with a very open mind unhindered by the politics. Politics in this industry which make me really sick by the way and have no bearing on being honest to their readers. Simply having an open mind is one thing, but being honest and willing to go against all those preconceived notions and politics is another. It is called chutzpah!

So there i was kicking myself in the butt about going to the Stereophile Hi-Fi '99 show in Chicago and not the great show happening at the same time in Germany. Aahhhh, Germany. The autobahn, Porsche... N_rburgring! In fact Hi-Fi '99 was a very casual and enjoyable show because there were no big crowds of people to contend with. While casually strolling through one of the lower levels i came upon a room which used the 47 Laboratories product. The room was sparse visually as i recall and what really got my attention were this very small product which was putting out incredibly good sound. A gentleman showed me this amplifier called the Model 4706 Gaincard which needed the Power Humpty power supply (gotta love the Japanese and their unique product names). The Gaincard was, well, this very small at 6.75" wide by 6" deep and 1.75" high that weighed only what seems to be a fraction of one pound! Seriously!

Model 4706 Gaincard and Power Humpty

The first thing i did was laugh. i just couldn't help it. C'mon, you probably would too after seeing all these big preamplifiers and amplifiers at the Hi-Fi Show only to come into this room and seeing this teeny tiny Model 4706 Gaincard and hearing it retails with the needed "Power Humpty" for \$2,750! Just hearing the words Power Humpty still makes me laugh. My humble apologies, yet vision of Humpty Dumpty or people dancing to the song "Humpty Dance" by the Digital Underground fill my head. Ok, this proves my ignorance perhaps. Sad but true. So after being amused i regained my composure and listened to the benefits of this piece. After a few minutes i began to realize that this was either a hoax or something really special. The pessimist in me felt it more of a hoax, yet if 47 Laboratories was willing to send me a review sample i would give it a fair listen. After all, people still laugh at me when i tell them about once owning the now \$90,000 Audio Note Ongaku 27 wpc all silver wired, ultra-purist, hand made only during nights with a full moon by vestal virgins. This is extremist single-ended integrated tube preamp/amplifier territory folks!

"If a man wishes to be sure of the road he treads on, he must close his eyes and walk in the dark"

-- St. John of the Cross

Let us get one thing out in the open here, Sakura System's motto is "Only the simplest can accommodate the most complex." My personal love for all things Zen immediately came into action. Everyone by now knows that single-ended tube amplifiers use very few parts and this is considered by some as partially why really good SE tube amplifiers sound as they do (extremely transparent and amazingly musical). Upon learning more about the Model 4706 Gaincard i discovered that it contained the "world's smallest number of parts - 9 parts per channel (excluding attenuators)" with also the "world's shortest signal pass length - 32 m/m (including the length of parts)" according to their website. For those metrically challenged, this means that the entire signal path is less than 2 inches long! The Model 4706 Gaincard runs in Class AB and has negative feedback whose signal length is less than 1/2" long including the length of the resistor! Each channel is in it's own separate aluminum chassis compartment which they claim helps to "release vibrations smoothly". Each channel also has a 12-

position attenuator. While a single Power Humpty can run the entire unit, you can use a second Power Humpty for true dual mono operation. Now to make this an even harder sell to your normal everyday audiophile, if there is such a thing, is that the total power output is 25 watts per channel. What did you expect, 1.21 jigawatts? Enough foreplay, it is music time baby!

Upon first listen with one Power Humpty as supplied to me it was good, though i was not overly impressed. Maybe i was still trying to get over the small size and weight? After a few days of break in something mysterious happened. It was as though, as though... as though someone brought back my beloved Audio Note Ongaku! Ok, so maybe not exactly like the \$90,000 Audio Note Ongaku, though there was so much rightness, so much freedom, so much musical soul. How can this be explained to those who have never heard this... The Ongaku is among the rare treasures on earth which allow the recorded music to transcend time and space and bring the musicians soul and intended musical message into one's listening room. It is more than transparency, more than correct harmonics, it is a freedom from what i call "beat" which is generally heard only during true live acoustic musical performances. If you are a drummer, it is the difference from playing the 4/4 beat and playing "in the pocket". There are very, very small timing cues which while not perfectly on the downbeat, they are playing a very small amount before or after the exacting beat timing which gives the music a unique feel, or soul.

Alas, i have found that only the truly rare systems and products offer this type of rhythmically musical freedom. The Audio Note Ongaku, the Clearaudio Insider Gold MC cartridge, and now the 47 Laboratories 4706 Gaincard can be added to this very small list. While this might seem like making a big deal over such a small thing as timing cues, please remember that music is really nothing more than various frequencies occurring over time.

"As is the human body,

so is the cosmic body.

As is the human mind,

so is the cosmic mind.

As is the microcosm,

so is the macrocosm

As is the atom

so is the universe." --- The Upanishads

This added freedom also shows how much deep inner resolution the Gaincard has. On music i have heard time and time again such as my favorite Miles Davis vinyl box set from Analogue Productions to my prized mint UK original pressing of Pink Floyd Dark Side of the Moon. As rarely heard, there is a deep inner detail and a seemingly infinite depth while the music washes over my soul. It is as though i sit here now trying to explain a more spiritually moving experience vs. the usual "here's another piece of equipment that does A, B and C, right but D could be better". The 47 Laboratories 4706 Gaincard transcends all this rubbish and goes into the rare realm that only pieces such as the Ongaku travel.

From the very small harmonic details as each musical note decays to fast transient attacks, the Gaincard seemed untrippable with my personal reference KEF 104/2 (modified) speakers. In fact the Gaincard even handled the new Magnapan 3.6 speakers, with their low sensitivity, quite well! Considering this is only 25 watts per channel, it actually did a very admirable job to the point of making me wonder about the advantages of using the Bryston 7B ST monoblocks that were also here for a brief period. Of course the volume point was limited with higher SPL listening session with the Magnapan, but this was not evident with small jazz and mellow classical music.

"What is the sound of one hand clapping?"

-- Zen Koan

Yoshi was kind enough to supply me with a second Power Humpty for true mono operation with one power supply per channel. It was also at this time i read Herb Reichert's great review of this unit in Listener Magazine Volume 5 Number 2 Sprint 1999 (Steve sez: subscribe to Listener, one of the few great audio reads in the English language!). i was amazed that Herb did not cover more about adding the second power supply, though maybe he had his reasons. i can easily see how Herb can compare the Gaincard to the Ongaku. Herb is very qualified in making this comparison as he was previously the distributor of Audio Note gear in the USA. i found that adding the second power supply actually took away from the music. Sure it made the music tighter and added a bit more dynamics, yet this seemed to come at the expense of the flow and wonderful rhythmic ability i so enjoyed about the unit. After a

few days of experimentation using the second Power Humpty, i removed it and never looked back. One power supply is all this, as Herb Reichert might call me, "Bohemian or a starvin' Marvin" needs. As Sakura Systems say "Only the simplest can accommodate the most complex" and who am i to argue?

***"It is only with the heart that one can see rightly;
what is essential is invisible to the eye"***

-- Antoine De Saint-Exupry

To wrap this up, it seems we have a very unique unit here which totally obliterates all preconceived notions. This solid-state, Class AB, negative feedback using unit totally blew me away. There is nothing, an i mean nothing that my ears have hear that comes close to sounding this good for under \$3,000... or even \$7,000 that i know of! The next step would probably be one of the better Wavelength Audio single-ended tube audio masterpieces. Many of you remember how i first brought the now seemingly legendary Lehmann Audio Black Cube into the worldwide audience. i can only hope this review has the same affect as the 47 Laboratories 4706 Gaincard is the rarest of musical instruments. Like finding a Stradivarius in a sea of mass produced student model violins. Why settle for the same electrical circuit rehashed when you can own a true handcrafted work of art like the Gaincard?

My humble apologies for giving a full blow by blow detail of the unit, yet when your soul is moved by such a great device as the Gaincard, you lose all your own preconceived notions of a review and just allow the words to flow onto the page. Maybe it is better this way. Les thinking, more feeling... more music. Could life be any better? As an added bonus, Yoshi has graciously interviewed the main craftsmen at 47 Laboratories for us. Alas, since i speak no Japanese, i gave Yoshi my basic questions and he flew to Japan. Please read this interview by clicking here.

"Knock on the sky and listen to the sound"

-- Zen Saying

***"All you touch and all you see
is all your life will ever be"***

-- Pink Floyd

Tonality	92
Sub-bass (10 Hz - 60 Hz)	75
Mid-bass (60 Hz - 200 Hz)	85
Midrange (200 Hz - 3,000 Hz)	95
High-frequencies (3,000 Hz on up)	95
Attack	90
Decay	95
Inner Resolution	95
Soundscape width front	95
Soundscape width rear	95
Soundscape depth behind speakers	95
Soundscape extension into the room	95
Imaging	95
Fit and Finish	90
Self Noise	100
Value for the Money	95

Manufacturer Reply:

Dear Steve:

Thank you very much for a wonderful review on Gaincard amplifier. I translated the essence of your review for Mr. Kimura and Mr. Teramura and talked with them on the phone.

Yoshi) Hi, guys! Did you read the review?

Kimura, Teramura) Yes, we did!

T) It is very good, and I think Steve is right on target when he talks about subtle rhythmic variations created by musicians conveying heart and soul of music. That also explains what I call "activity" pretty well. Does he play drums or percussion himself?

Y) I think once he told me he plays drums.

K) Yes, many of our clients are musicians themselves. I also liked his way of writing very much. I don't know about his other reviews 'cause I've never read them, but it seems that he goes right into the essence of the design at least in this case. I hope we have this type of reviewing in Japan too.

Y) What do you think of his comments on adding extra power supply?

K, T) -----(silence)

T) Anyway, he seems to understand the music and it's reproduction pretty well. Why don't we ask him to be our distributor instead of Yoshi?

K) Huh, worth consideration.

Y) Yeah, right-----.

K) Well, whatever waits in the future, please give our sincere thanks to Steve and Enjoy The Music.com. We are thoroughly impressed and thrilled by the review.

So, thank you again, Steve. We hope that you check out other 47 Lab products too in the near future.

Yoshi Segoshi/Sakura Systems

www.EnjoyTheMusic.com Review Magazine, August '99 issue

47 Laboratory 4706 Gaincard

Listener, Vol. 5, No. 4 (Excerpts from "The SET Set")

I could not resist popping this low-power solid-state integrated amplifier into the mix. Every audio no-no is committed here: op-amps (integrated circuits), teensy chassis, midget speaker terminals, and stepped pots that are way too coarse.

Twenty-five watts is a lot of power for this survey, but it was not the resulting dynamic oomph that impressed the listeners: Try the effortless non-fatiguing sound and the best bass I have heard from any amplifier. Unlike Herb Reichert (see his Gaincard review in Vol. 5, No. 1), I like this amp cold as well as warmed up. Transient snap is so sharp and clear it is almost overwhelming. But then the hotter it gets (as in time spent playing music) the more three-dimensional it becomes---so be patient.

The Gaincard has a clear neutrality I associate with SETs. I do not get the push/pull listening barrier often heard as tension or awkwardness in the sustain, nor do I hear diminished (transistor) decay.

When I read a good review of a new product, I wait to hear it myself or to see if two more positive reviews appear. Well, count this as Rave No. 2. And think of this short mention as being in keeping with the Gaincard's greatness: Less is more. It's the best transistor amplifier I ever heard in my system. It redefines effortless clarity, and can drive a far wider group of loudspeakers than any of these low-powered SETs.

The 47 Laboratory 4706 Gaincard amplifier

Here's a shocker: imagine a solid-state amplifier that would rest in the palm of one hand, rise to only a little over 1 inch high, that's a true dual monoblock design. With an input to output distance measured in a few inches, total. Dual inputs and dual stepped volume controls; grounding posts; built-on mini-tiptoes; a proprietary power input. Nothing else. Visualize an external power supply that's round, much larger than the amplifier that it powers, exceptionally heavy and named Humpty. (Yes, you read that right.)

Now realize that this unique little powerhouse tandem pumps out 25WPC into 8 Ohms.

Got it?! If so, then you're imagining the 47 Laboratory 4706 Gaincard amplifier.

Yoshi Segoshi waited more patiently than anyone for us to get the low-powered system together. I appreciated his perseverance enormously, so immediately put the Gaincard into place right after the V20. Once again, we ran long leads from the CD-12 and SCD-1; only this time, we went directly to the Gaincard without any intervening input switching sections. This is one of the few times that I've run straight to amp from a source. Normally, I'm not a fan of skipping the preamp; it's too much bother to switch the leads, and a good active preamp "fills in" the sound, keeping it from being too lean, at least in my opinion.

The results were nothing less than spectacular! I could scarcely believe my ears - the quality of the music coming from the Lowthers was spectacular! For such a small and unusual amplifying system to produce sound of this level of excellence, was a thing unprecedented in my listening room. The Lowthers continued to show their strong suit, an exceptional midrange, as before. But now the bass was at least as well controlled as it had been with the V20 - a tubed mini-powerhouse - and the dynamics were even better than they had been with the V20. The sound was clear, uncolored, effortless, and at ease. High frequency extension was very fine; timbral resolution was detailed, without ever being etched or fatiguing.

Extraordinary!

To confirm these impressions, I had Tony Glynn come back by the listening room, and had my Assistant Editor, Rick Gardner, sit in as well. Both were struck by the synergy between the Lowther PM2A's and the Gaincard. Tony was particularly surprised. He knows his Lowthers quite well, and has heard them in tandem with a number of fine preamp/amp combinations. He was completely unfamiliar with 47 Laboratories and the Gaincard. Rick Gardner didn't know the Gaincard either, but gave it an immediate rave. (As an unrepentant rock 'n' roller, Rick found the sound of the Gaincard with the Lowthers to be far preferable to any of the 2A3's that he heard in my listening room.)

We put some fine SACDs through their paces: the Sony Music Kind of Blue and superlative Mingus Ah, Um; DMP's Quality of Silence; Telarc's Brubeck: The 40th Anniversary Tour of the U.K. (love that piano!). The results were superb - never fatiguing, and yet clear, very detailed, unveiled. Which is what SACD does: it delivers master tape or mic feed level signal. In this case, the destination for that signal was sitting us right up in our chairs, getting our heads to nodding and our feet to tapping.

In other words, children, we were connecting to the music.

Tony conceded that the Gaincard did a marvelous job with the Lowthers. "Jeez, I'll have to remember 47 Laboratory, I guess!" Given Tony's strong preference for SETs ("I hate those goddamned sand amps!"), this was quite an achievement. Rick was emphatic about it: "Now I could really get into the Lowthers when they sound like that!"

So, for those looking for a heavily dynamic experience ("gotta have lotsa' slam, dude!") with the Lowthers, or with any other speaker happy with its rated 25 WPC, the 47 Laboratory Gaincard is a slam-dunk.

This is absolutely one of the most surprising and pleasant discoveries in my listening room during the past several years! The Lowther/Gaincard system therefore rates a Ye Olde Editor's highest recommendation.

Insert from "SACD, SETs, Lowthers, and Other Life Forms: In Which PF Takes A Magical Mystery Tour!" by David W. Robinson, Positive Feedback Vol. 8, No. 4

What you missed...

by **Valerie Kurlychek**

DIGITAL DAY

First, a big thanks to Yoshi Segoshi for taking the time to bring the Sakura Systems Lab 47 products to us. It was a great session, musically speaking, with some wonderful CDs contributed by attending members. It says a lot about a system when members feel free to focus on the music as they did at this session. When we can sit back and just get excited about the music and the performances, it tells me that the system designer has achieved his objective - in this case, Junji Kimura, a self-described "passionate audiophile" and an engineer with over 30 years of audio design experience in his bag of tricks. Grounded firmly in LP playback systems and tube components, Kimura "found himself more and more frustrated with the sound of CD playback systems" and resolved to do something about it. (Indeed.)

TWO FRUSTRATED GUYS . . .

His first line of attack was the development of a new design concept in CD transports as well as tinkering with some revolutionary design concepts in solid state configurations. Enter Koji Teramura, "a long-time hotheaded audiophile" and owner of a stereo shop in Tokyo. Teramura was equally frustrated not only by digital's sterile, unmusical sound, but also by "trendy, brand name components with astronomical price tags." (InDEED. . .)

He took one listen to Kimura's work and proposed a partnership on the spot! But what had really attracted his attention was a diminutive prototype amplifier that was (obviously) solid state, but did not sound like it! (This turned out to be the starting point for the eventual realization of the Model 4706 GAINCARD we heard at the meeting.) Thus, Sakura Systems Lab 47 was born.

") - YES! One per channel!!) This little amp also boasts what they claim is the shortest signal pass length -- 32 mm, which includes the length of the parts.

According to the literature, they have also approached negative feedback in a new and effective way by shortening the length of the feedback loop to 9 mm (including the length of the resistor). They claim that they achieved this "breakthrough" by utilizing power IC and "intricate point-to-point hand wiring." Indeed, such connections are made with the aid of a jeweler's loupe, so tiny and otherwise difficult are they.

But this tells us a lot about the objectives with which Kimura approached the design of these components, and to these ears he has very much succeeded.

All the Lab 47 components sport an external power supply, called, somewhat whimsically, either "Power Dumpty" or "Power Humpty." The former teams up with the DAC; the latter with the GAINCARD, Phono Cube and "Input Chooser.") These are also craftily designed so that one might start with one, as each has two connections to accommodate the two mono channels, but an improvement can be made by adding a second Humpty (or Dumpty ;-) for true monoblock operation.

We heard their transport (which they've dubbed the "Flatfish" - a prototype version not yet commercially available) and DAC wired directly into the amplifier, so cannot comment here on the line stage. We also did not get to sample the sound of the phono cube, largely because of the logistics of Russ' system setup.

And speaking of wire, it was one flabbergasted group that sat disbelieving and stared at the 0.4 mm OFC solid-core copper wire that looked for all the world like so much fiber optic cable splayed between the units - - and especially to the speakers! Contrasted with today's superwire that generally runs the thickness of one's thumb and massive, gold-plated terminations, the Sakura method of connecting what amounts to the bare (and very tiny) wire to the terminals seemed like audio heresy!

So, the system was all Lab 47 with the exception of the loudspeakers supplied by Segoshi for the occasion, the German-made VIRGO by Audio Physic.

Unless driven well beyond their 25 wpc capabilities (and that takes some doing - make no mistake, there is plenty of headroom in this tiny amp, belying its Lilliputian size) the Sakura 4706 amplifier has a broad and deep soundstage together with surprising speed and focus. Segoshi attributes this to their philosophy of minimal circuitry. The designer's objective is to recreate the "heart of the sound" which he defines as "living in the point of contact where musician and instrument meet." I think this is another (and more poetic) way of describing transient speed. They refer to this sound quality as being "lively"

and "fresh" and it certainly seemed so. They have also striven for overall coherence, and to accomplish this they "try to minimize any storage of energy, either mechanical or electrical." But they also state that both "vibrations and electrical current come from the same energy" and accordingly they approach the problem not through conventional damping or suspension designs, but by extremely rigid and compact chassis construction.

It seems to work very well, though in my audition here I did set the units on a fibreboard tray set in turn upon Vibrapod 'Isolators, and I was most impressed with the absence of noise, coloration or ss "grit."

As said earlier, the group immediately plunged into an orgy of listening - not to the system, but to the music. A telling outcome.

GETTING INTO THE MUSIC . . .

Among these delights of discovery were a blues singer of such breathtaking dimension as to mesmerize -- Eva Cassidy. No, you've never heard of her, and she made only a few recordings -- sadly, her untimely demise from the dread scourge of melanoma means that only this handful of recordings is all we'll ever get. What a shame that an artist of this immense native talent was cut down so abruptly and so prematurely. (For those on the internet, you can find her recordings at www.blixstreet.com; for those not yet online, call Liaison Records at 410-880-6111 and buy at least one -- you won't be sorry!) Another unusual but captivating recording was a Harmonia Mundi disc, HMC90389, "Musique Arabo-Andaluse" as played by the Atrium Musica de Madrid. Put this one on, close your eyes and float away in images of exotic belly dancing. What struck me about this disc was the pinpoint imagery of the instruments and wonderful sense of depth.

But virtually every selection played -- ranging from baroque to rock - was portrayed with easy, unstrained musicality, unforced perspective and full-bodied production. No frequency response figures are given -- but I didn't hear anyone complain of missing octaves at either end, so complete is the musical picture it presents. It does indeed seem that Kimura has achieved his objective (though I doubt he'll stop here) with flying colors. It does bring to mind the Oriental concept of "less is more" and in this case -- it appears to be entirely valid.

Yes, indeed.

"as appeared in the July 1999 issue of THE SOURCE, the newsletter of the New Jersey Audio Society. For more information about the club, e-mail annalogg@aol.com."

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NJAS Report

The 47 Laboratory System

Review by Blair Roger

I suppose you're going to think I'm a complete hypocrite, and I wouldn't blame you if you did. I don't really care. It's only solid state - but I like it!

I've spent the last two years telling you how much I love the sound of tubes, particularly the Jadis and Bel Canto amplifiers, and now I'm going to turn around and proselytize for some solid state gear - from Japan. Yes, Japan: the little island nation that brought us Sony, Sansui, Panasonic, Yamaha, Yorx and many other fine brands of transistorized receivers that rocked us out of our adolescent bedrooms. The Japanese knew what North American youth wanted back in the 1960s: power and lots of it. Distortion be damned. Distortion was way cool 'cause Big Bad Dad couldn't stand it. For many of us, too young to own a car or a motorcycle, a loud, hideously gritty stereo was the ultimate form of rebellion. So BBD (as he was affectionately known) would retire to his den, light up a briar pipe and settle back to listen to his new Marantz 10B, Quad IIs and ESL-57s. Odd how we grow to respect the intelligence, tolerance, and sensitivity of our elders, as we grow older, isn't it?

The only similarity between those execrable brands of audio equipment that figured so large in our youth, and remain forever tainted with juvenilia, and the 47 Laboratory System is the fact that they are all bereft of tubes. In the case of the 47 Lab, it's a good thing.

System description

The entire 47 Laboratory System is the creation of Junji Kimura. He is an electronic designer and audiophile who has worked for an impressive variety of audio firms. In 1963, at the age of 23, he began with Pioneer, moving on to Kenwood, Luxman and Kyosera before founding his own company, 47 Laboratory, in 1992. This is a very unusual pattern of employment. Typical Japanese workers stay with one employer for life. However, there is nothing typical about Kimura-san or his products.

The heart of the system is the Gaincard amplifier: dual mono in construction and housed in a highly rigid aluminum chassis measuring 6 ¾" x 1 ½" x 4" (WxHxD). Front and rear panels are 0.04" thick machined aluminum plate. Please try to visualize this positively Lilliputian stereo amplifier. It's about the size of two decks of cigarettes. You can easily hold it in the palm of your hand and it looks indestructible. Finish is brushed black aluminum and markings are extremely understated, some so minutely engraved that you may need a magnifying glass to read them. I certainly did. Controls consist of one stepped attenuator per channel and a pair of sub-miniature mute switches. There is no on/off switch as the system is meant to be powered-up all the time.

There are only ten parts per channel including the twelve-step dual-mono attenuators. In conjunction with the electronically stiff and hefty (170 VA) Power Humpty outboard power supply, the Gaincard produces 25 class A/B Watts per channel. My bet is they're mostly class A. Signal paths are extraordinarily short because the circuit board for each channel only measures 1 ¾" x 1 1/8". The chassis contains no damping or potting material.

A matching selector box, called the Chooser, is available to facilitate the use of four unbalanced inputs and two pairs of unbalanced outputs. The Gaincard and Chooser are meant to be stacked one above the other and couple neatly together with three mini spiked feet. If your system is dedicated to a single analog or digital source then you really don't need a Chooser. Add one later when you really need it.

Kimura-san thinks of everything, including interconnects and cables, as being part of the system. He has developed interconnects of such simplicity that I laughed the first time I saw them. They are called the OTA Kit and consist of 12 pairs of machined, soft plastic RCA plugs, 50 meters of 0.4mm solid core OFC copper wire and 2 mm of plastic (Teflon?) tubing for insulation. The user can make up custom length interconnects and speaker cables without any solder connections - only scissors and tweezers are required. According to the manual, the Master believes that "These are the necessary and sufficient requirements for a conductor suitable for audio cables. In other words, other characteristics do not matter." After listening, I can't disagree.

As my personal system is analog based, the Canadian distributor of the 47 Laboratory System supplied me with the diminutive Phono Cube and matching outboard Power Humpty. This proved to be a bit of a luxury as both the Gaincard and the Phono Cube can be powered from a single Power Humpty. On the other hand, I just learned from Yoshi Segoshi, the American distributor, that with some extra connectors I could run the left channel of the Gaincard and Phono Cube from one Humpty

and the right channels of each from another Humpty for true dual mono power. Then for a digital power source, just add a third power supply, called the Power Dumpty. Well, why not? As Surrealist painter, Salvador Dali said in a television commercial about thirty years ago, "When you've got it, flaunt it".

The Phono Cube, like the rest of the system is dual mono and measures only 3 ½" x 4" x 3 ½" (WxHxD), and features standard and high gain inputs. Output is 47 Ohms and, as I discovered, this unit is meant specifically for use with the Chooser/Gaincard. I'm not sure that anyone but Kimura-san understands exactly how this works but the input impedance of the Phono Cube is zero Ohms (yes, zero!) and I quote the manual: "(this) enables all of the current generated by the cartridge to flow directly into the amplifying circuit." Therefore, instead of trying to step up the fractional millivolts produced by your MC cartridge (along with all the noise), the Phono Cube passes all that beautiful, pure current right through to the amplifier without any voltage dependant frequency peaks and valleys. And it works - at least with the Gaincard, I should say. My Jadis Orchestra amplifier was unable to consummate a relationship with the Phono Cube so I would venture that if you are considering the 47 Laboratory System, mixing and matching could be a questionable proposition. If you are unsure, and just want to get your feet wet with a superb phono section, why not ask your dealer if you can try it at home with your own setup?

How to Listen to the 47 Laboratory System

This brings me to a crucial point. The first time I heard the 47 (as I'll call it for brevity) in my home, I was rather unimpressed. In fact, I don't think I really liked it. You may feel the same way and wonder what all the fuss is about. Don't make any hasty judgements based on what you hear at the dealer's salon. Similarly, refrain from doing so based on what you hear at home until the Gaincard has been powered up continuously for a minimum of three days. All components in the 47 system run very cool so I never worried about leaving them on all the time. I really started to like what I was hearing after about a week of break-in. This effect is very strange and somewhat difficult to explain but your patience will be rewarded. Either that or you'll decide the 47 just doesn't do it for you.

Something else of great significance for many readers: you will have to give up your Watt fetish. More is not better. Don't be put off by the 47's 25 Wpc rating. Kimura-san is just being honest with you. If he told you it was 100 Wpc, I doubt that any of you who are music lovers would question him or even care. Putting things in context, I listened to the 47 for several weeks driving my pair of Quad 63 Monitors in a room about 18' x 25' and rarely felt them to be out of their depth. A slightly smaller room would be perfect. Slightly more sensitive speakers might do the trick (and by that I mean they would send you to Heaven). Experiment. Get loose. Have some fun! The dynamics and frequency response of the 47 will have your friends dropping their hors d'oeuvres and spilling Vodka Martinis on the Kirmin rug. Really.

Listening

I'm going to be blunt about this: the 47 has to be broken in with at least one week of continuous power-up, and if you're looking for tube sound you've come to the wrong place. If you want to listen to music, then settle back and let the 47 weave its delicate spell of silken thread. Now this is 'high definition' audio. It is a sound that is subtly different from what I have come to know as some of the best in either camp - vacuum or solid state. It is a sound for connoisseurs: those who can appreciate the difference, let us say, between very, very good tuna sushi and Hawaiian tuna.

First came the shock of the solidity with which the 47 presents a soundstage. Before knowing anything about the Gaincard I said, "This is dual-mono, isn't it" and laughed aloud. Then I realized that this tiny amp driving the Quad 63s is rated at only 25 Wpc and that I could hear the subways criss-crossing under Kingsway Hall very clearly on the RCA re-issue of Swan Lake from The Royal Ballet Gala (LDS 6065). I have never heard such deep, shuddering bass from Quad 63s before. And this with the 0.4 mm solid core OTA Kit speaker cables. The intoxicatingly beautiful harp solo to stage right soon proved the Gaincard's finesse with treble transients that were quick, clear and anything but threadbare.

I have a very unusual piece composed by Mozart; Notturmo for Four Orchestras K. 286 recorded by Peter Maag and the London Symphony Orchestra (STS 15088) for Decca/London. The main orchestra stretches across centre stage with the second, smaller group behind it to stage right. The third group of players is seated on the far left of the stage and the fourth orchestra is behind the second one, again on stage right. Mozart tosses the parts around between strings the orchestras, simulating an echo of the melody played by the first orchestra. The timbre of the strings is light and delicate and the echo effects revealed by the 47 are spellbinding.

Speaking of echo effects - my favorite test record is a bit of fluff concocted by harpist Andreas Vollenweider called *Caverna Majica* (CBS 37827). It's sort of a pop-synth impressionist tone-poem fantasy about the adventures of a couple that stumbles into a magic cave. In the opening cut they discover the entrance to the cave, and as they enter the main gallery from a footpath the sound stage suddenly explodes with the synthesized echoes of their boots splashing about in a space that must be the size of an aircraft hanger. I've never heard it sound larger or more detailed than with the 47 Gaincard and Phono Cube. Very amusing.

Finally, for beauty of tone and depth of emotional involvement, it would be hard to beat the Adagio from Shostakovich's *Symphony Number 7: The Leningrad* from the winter of 1941 as performed by the Bournemouth Symphony under Berglund (EMI SLS 897). As the composer wrote, this movement was meant to represent "great pathos expressing ecstatic love of life and the beauties of nature." When I listen to this piece, I am in the hall at its premiere in Leningrad. I feel I have lived my whole life for this moment. I forget myself and become one with the music.

Conclusion

The 47 Laboratory System cries out to be carefully matched with sympathetic ancillary components. In the relatively short time I had it available to me I grew to enjoy the sound of the Phono Cube and Gaincard very much. However, I knew that the rest of my system was not optimized to take full advantage of their subtle characteristics and capabilities. As I said previously, slightly more sensitive speakers or a slightly smaller room would be beneficial. Additionally, the prospective purchaser should select their phono cartridge with great care to avoid an overly tipped-up treble. This would be the kiss of death with solid state gear of this refinement. At the other end of the frequency spectrum, be sure your speakers don't truncate the bottom octave or reproduce it as mellow mush. If that's what you hear, don't blame it on the 47.

www.audiophilia.com, September 1999

Edited by Sead Lejlić

Sasvim na svoj način

Milan Rupić

Premda postoji od 1992. godine, za tvrtku 47 Laboratory do danas je čuo malo tko, čak i među onima upućenijim pratiteljima zbivanja na svjetskoj high-end sceni. Doduše, oni koji su u bili u Las Vegasu na CES-u 95 mogli su u širokoj paleti raznovrsnih audionovina uočiti i masivnu metalnu konstrukciju gotovo preko 25 kg teškog CD transporta s logom 47 Laboratory. Međutim, ovo djelo renomiranog japanskog audiokonstruktora Junjija Kimure unatoč svojoj atraktivnosti i zanimanju koje je pobudilo nije bitno promijenilo status tvrtke u high-end hijerarhiji. Prije svega zato što je taj prototipni probni balon najmanje zadovoljavao svojeg konstruktora. I tko zna kako bi tekli događaji da se jednoga dana u Kimurinom laboratoriju u Tokyju nije pojavio njegov sugrađanin Koji Teramura, zadržni audiofil i vlasnik trgovine high-end uređajima i potrepštinama, kao i sam Kimura duboko nezadovoljan i već pomalo frustriran zvukom velike većine vrhunskih uređaja za kvalitetnu reprodukciju zvuka koji su koštali sve više i više, a nisu nudili značajniji odmak od već dosegnutih standarda.

Nagomilano nezadovoljstvo ubrzo se prometnulo u pozitivnu energiju koju su obojica uložila u konstrukciju praktično cijelog reproduksijskog niza, od CD transport/DAC kombinacije, preko MC fono ekvalizera do integriranog pojačala i kabela, koji je trebao riješiti njihovo nezadovoljstvo i utrti novi put u promišljenju vrhunskog audia. Na rezultat nije trebalo dugo čekati. Vodeći se zenovskim sloganom "Samo najjednostavnijim načinom mogu se riješiti najsloženiji problemi" ubrzo su iznjedrili niz proizvoda koji svojim izgledom, a ništa ni manje konstrukcijom, u najmanju ruku zbunjuju. Za razliku od većine primjeraka prvoligaške high-end produkcije koji impresioniraju koji puta i pomalo apsurdnom masivnošću i veličinom, proizvodi 47 Laboratoryja bili su sušta suprotnost trednovskom stilu i više nalik neozbiljnoj zonskoj audiositnezi nego rasnim primjercima iz ezoteročne ergele.

Jedinstven pristup, neobičan rezultat

Prilazeći problemu iz sasvim drugog kuta i težeći dosegnuti sva ona bitna obilježja koja krasi vrhunsku anlognu audioreprodukcijsku kombinaciju - tonalno i timbralno bogatstvo, realitet, životnu svježinu i ambijentalnost - Kimura i Teramura su, vodeći se načelom "više glazbe, manje (suvišne, beskorisne) tehnike" iznjedrili niz uređaja koji, po njima, znatno vjernije od svih dosadašnjih slušatelju prenose glazbenu životnost (koju oni nazivaju "activity") i svježinu kojom zrači kontakt glazbenika i njegovog instrumenta. Sudeći po dojmovima s preliminarnih slušnih seansa u tome su umnogome uspjeli. Zapravo, radi se o nesvakidašnjem postignuću koje se u nizu krucijalnih parametara značajno izdiže nad većinom onoga što se uvriježilo kao standard vrhunske reprodukcije zvuka. A da to nije lako postići, dobro zna svaki iskusni audiofil. Jer da bi prenio nepsrednost i ogromnu energiju glazbe, njezin munjeviti rast i strmoglavi pad i to uniformno, po cijelom frekvencijskom opsegu, uređaj mora reagirati brzinom pume, biti jednak tako tih, imati integritet bojnog broda i profinjenost i prozračnost impresionističkih platna. To znači da svu energiju koju stvori mora trenutačno predati zvučnicima kako se ne bi, u bilo kojem obliku, mehaničkom ili električkom, gomilala u njemu, mora imati pouzdan i masivan napajачki sklop koji će trenutačno odgovoriti na bilo kako složen zahtjev, i omogućiti da signal kroza nj prođe najkraćim mogućim putem i kroz što manje dijelova.

Kako to izgleda u praksi lijepo se vidi na njihovom jedinstveno riješenom pojačalu 4706 Gaincard s napajачkim sklopom 4700 Power Humpty, oba nadasve neobičnog izgleda i konstrukcije. Pojačalo čiste dvostruke mono konfiguracije, u dva odvojena, vrhunski precizno izrađena aluminijska kućišta (40 mm x 80 mm) povezana u jedno prilično debelim (10 mm) i masivnim prednjom i stražnjom pločom, široko je 170 mm, visoko 40 mm i duboko 100 mm, jedva je, dakle, veće od klasičnog Sonyjevog profesional walkmana. Cilindrično oblikovan napajачki sklop je dimenzijama znatno veći, ali daleko od impresivnoga: u promjeru je 1 cm veći od CD-a, dužine 195 mm. Pojačalo je perolako, jedva pola kile, dok napajanje važe gotovo deset puta više. No, sve u svemu, oba elementa čine sklop tek nešto masivniji od prosječnog širokopotrošnog CD plejera. Ni u jednome od njih nema nikakvih prigušnih materijala jer su konstrukcijski tako riješeni da generiraju zanemarujuću količinu vibracija i da rezonancije njima izazvane trenutačno pretvore u tolinu u dispiraju u okolinu. Na prednjoj ploči su dva preklopnika za glasnoću s 12 pozicija i dva mala kip-prekidača koji služe kao mute ili kao prekidači za uključenje ili isključenje pojačala, mada ovo potonje nije klasično riješeno i treba biti uvjetno shvaćeno. Na stražnjoj ploči samo je jedan par RCA konektora, što znači da se može koristiti samo jedan izvor zvuka, o čemu svjedoči i izostanak bilo kakvog birača ulaza. Oni koji žele komfor i mogućnost brzog prebacivanja s jednog izvora zvuka na drugi, morat će nabaviti njihov 4707 Input Chooser, pasivni birački sklop jednakih dimenzija i izgleda kao i 4706 pojačalo, s četiri ulazna i dva izlaza terminala, svi

RCA. Zvučnički terminali su dva vijka ispod kojih se može ugurati tek nešto tanji kabel, terminiran viličama ili - gol. Puno ozbiljnije riješena i od njih masivnija su dva terminala za uzemljenje svakog kanala posebno. Unutrašnjost pojačala čine dvije male (45 mm x 35 mm) tiskane pločice na kojima se nalazi ukupno 9 (devet) elemenata kroz koje signal prolazi put od 32 mm, uključujući i veličinu elemenata koji se pod mikroskopom ručno leme na pločicu. Glavni, dakle pojačivački, element sklopa nisu tranzistori. Nisu niti cijevi. Pojačanje obavlja operaciono pojačalo, integrirani sklop koji u klasičnim pojačalima služi kao pobudni sklop izlaznih tranzistora. Ukupni kapacitet kondenzatora/filtera je 1000 mikrofarada, što je bez daljnjega namjane što se ikada našlo u bilo kakvom pojačalu s hi-fi natruhama, manje i od onoga što se nalazi u tranzicima ili najobičnijim autoradijima. Time se riješio problem skladištenja energije. Međutim, pošto napajanje energijom ovisi o kapacitetu kondenzatora, moglo bi se dogoditi da je uzmanjka u vršnim trenucima. Da se to ne dogodi brine se transformator od 170 VA koji kondenzatorima u svakome trenutku isporučuje dovoljno energije kojom se u cijelosti mogu realizirati i najsloženije glazbene dionice. Jedinstveno i drugačije nego obično riješen je i sklop negativne povratne veze (negative feedback). Umjesto da taj sklop, sukladno vodećim trendovima, sasvim eliminiraju, u 47 Laboratoryji su ga ipak zadržali, svjesni njegove korisnosti kod zvučnika s jedinicama velike ekskurzije membrane. Međutim, dužinu petlje skratili su na svega 9 mm, uključujući i duljinu otpornika, tako da gotovo nema vremenskog kašnjenja povratnog signala u odnosu na izvorni, niti šuma koji se kod klasično rješениh takvih sklopova neminovno javlja.

4706 Gaincard pojačalo je s 4700 Power Humpty sklopom povezano dvama vodičima s odvojitivim višepolnim konektorima, a sam je napajački sklop aktivan čim se priključi na mrežu. To znači da je pojačalo praktično stalno pod naponom. Usprkos tomu, vanjskih znakova o tome, osim male crvene diode u dnu prednje ploče napajačkog sklopa nema, niti se to može na bilo koji način, recimo opipavanjem temperature uređaja, detektirati. Dok se pojačalo ne optereti, mrtvo je hladno. Međutim, kad ga se koristi dulje vrijeme i kada mora pogoniti zvučničke sustave s osjetljivošću manjom od 94 dB, tada ga je bolje ne dirati rukama. O tome, pak, kako u takvom stanju ovaj jedinstven i izniman primjerak japanske audioezoterije, pojačalo od 2 x 25 W/8 ohma snage i ulazne impedancije 22 kilohma, vrijedno 3300 \$, postupa s glazbenim signalom, kao i o još nekim tehničkim zanimljivostima koje ga krasi, možete pročitati u narednom broju WAM-a.

WAM magazin, broj 2

Mali div

Integrirano pojačalo Laboratory 47 Gaincard 4706

by Milan Rupić

Premda dobro upućeni dio audiofila sklon istraživanjima već zna za Gaincard i Laboratory 47, ipak se o njemu i o tvrtki još jako malo zna. I tako, zahvaljujući agilnosti sarajevske tvrtke Konus Audio, mi ovdje u Hrvatskoj i Sloveniji, inače obično na začelju važnih audiodogađanja, stekli smo priliku da se među prvima u svijetu uvjerimo u mogućnosti maloga diva. Tako će i ovaj test, zajedno sa istim takvim u Sloveniji, biti vjerojatno prvi u Europi i među prvima u ostatku svijeta.

Znate onu o Muji, Hasi i karnisteru? Tko ne zna, evo: "Znaš li ti, Haso, da su Japanci izmislili karnister od 50 litara?" "Ih" - kaže Haso - "mi takvo što imamo već godinama!" "Je" - reče Mujo - "ali njihov je ovalički!" - pokazujući palcem i kažiprstom dva centimetra razmaka. Gledajući u Gaincard pojačalo, onima koji su vic već prije čuli, neodoljivo se nameće njegova vizualna scenografija, prizivajući na javu sve one frustracije koje Japanci imaju zbog skučenih životnih uvjeta, ali i frustracije ostatka svijeta kad vidi što su sve Japanci sposobni smjestiti na mali prosor.

Frustracija kao inspiracija

A da se iz pojedinčeve, pa i globalne frustracije svašta može izroditi, to je notorna činjenica. U nekima, tako, osjećaji nezadovoljstva nagomilani uslijed nemogućnosti zadovoljenja stanovitih nagona ili potreba urode monstuoznim činom, u drugih se pak prometnu u ingeniozne dosege. Kod Japanca, Junjija Kimure, 50-godišnjeg renomiranog audioinženjera koji je kruh svoj svagdašnji gotovo trideset godina zarađivao kao visoko pozicionirani dizajner u Pioneeru, Triu (danas Kenwood), Luxmanu i Kyoceri i neprestano bio nezadovoljan načinom kako su uređaji koje je dizajnirao reproducirali zvuk, frustracija izazvana komercijalnim kompromisima dovela je do odluke da ih izliječi na svoj način - sam i bez ikakvog kompromisa, vođen isključivo vlastitom idejom i vizijom dobro reproduciranog zvuka. 1992. godine osniva 47 Laboratory. Brojka 47 nije slučajno odabrana. Naime, na japanskome "ki" znači žuto, a "mura" purpurno. Na japanskoj skali boja žuto je reprezentirano brojem 4, a purpurno 7. Nakon tri godine rada Kimura predstavlja prototip svojeg prvog uređaja, CD transporta, kao dio sustava kojeg je držao glavnim vinovnikom zvučnih nedaća koje su ga opterećivale. Dalje od prototipa taj, dimenzijama i ustrojem grandiozni uređaj (25 kg), nije dogurao, premda je pobudio prilično zanimanje na CES-u '95. gdje je bio predstavljen. Jer, zvuk, ma koliko bio bolji od većine tadašnjih transporta na tržištu, po Kimuri nije imao ona bitna obilježja - tonalno i timbralno bogatstvo imuravnoteženost, realitet, životnu svježinu i ambijentalnost - koja krase vrhunsku anlognu kombinaciju. I da je to bila jedina frustracija, možda se ništa značajnoga ne bi ni dogodilo. Međutim, bilo je toga još. Stare frustracije izazvane značajnim različitostima u zvuku između MM i MC zvučnica koje nikada nisu bile prevladane i objedinjene u neupitnu kvalitetu, zvukom zvučnih kutija prema panelnim sustavima ili onima s rogom, čije su mane, doduše, pokušane biti prevladane različitim oblicima sinkretizma i hibridizacije, ili pak zvukom cijevnih naspram tranzistorskih amplifikacijskih sustava, čije su se različitosti također nastojale približiti i pretočiti u dobitnu kombinaciju, postale su tijekom vremena kritična masa koja je jednostavno morala potaknuti (re)akciju.

Tranzistori kao cijevi

Oduševljenog zvukom single-ended trioda, ako i većinu predanih japanskih audiofila, Kimuru je razdralo pitanje zašto ga nije moguće dostići i s poluvodičkim elementima. Što je to što ih toliko razlikuje, vrlo se ozbiljno pitao. Jednoga dana u njegovu radionicu, ali i u njegov audiofilski svijet, banuo je njemu sličan nazadovoljnik, Koji Teramura, vlasnik jedne od tokijskih trgovina kvalitetnom audioopremom. Njega je, osim svega što je mučilo Kimuru, kao trgovca smetao i sve veći nesrazmjer između cijene koštanja uređaja i njihovih reprodukcijских dosega. Bio je uvjeren da se audioindustrija, stremeći k svetom i nedostižnome cilju, sve više udaljava od njega. Da se u procesu otkrivanja i eliminacije izobličenja, nečistoća i nepreciznosti došlo do točke na kojoj zvuk kojeg reproduciraju takvi (tehnički savršeni) uređaji gubi većinu onih emocija i unutrašnje dramatike koje su krasile izvorni zvuk i sve više postaje statička i suhoparna prezentacija tonskih fakata u nerealističnom, virtualnom prostoru strogo proračunatih slušnih laboratorija. Tvrdio je da bez tih osjećaja i dramatike u sebi, reproducirana glazba gubi "aktivnost" i ne omogućuje uspostavljanje onakvog odnosa sa slušateljima kakav se događa za živoga glazbenog događanja. I da će se, nastavi li se tim putem kročiti, čistoćom i analitičnošću zvuka ubiti bit glazbe i sasvim je izolirati od slušatelja. Dakle, zajedno s vodom u kojoj se ku-

palo dijete, baciti i - dijete. Premda impresioniranog učincima Kimurinog CD transporta, ono što je Teramuru oborilo s nogu i uvjerilo da se može drugačije, bolje i sasvim u skladu s njegovom vizijom zvukovnog "aktivizma" namjesto purizma, bio je prototip minijaturnog pojačala s odvojenim masivnim napajачkim sklopom, To je bio embrion Modela 4706 Gaincard, neobičnog i sasvim posebnog uređaja koji je i integrirano pojačalo i pojačalo snage, ali zapravo ni jedno od toga, uređaj koji nema cijevi, ali se ne može u cijelosti svrstati ni u tranzistoroske. Uređaj koji će u mnogome promijeniti naša dosadašnja stajališta o načinu i kvaliteti reprodukcije glazbe, a pri tome će koštati znatno manje od mnogih SET pojačala, kojima je zvukom ravan ili čak superioran. I što uopće nije nebitno, biti 4 do 5 puta snažniji od većine njih.

U najavi testa Gaincard 4706 pojačala s napajачkim sklopom Power Humpty 4700 detaljno je opisana većina njegovih posebnosti. Opis onoga što nije, upravo slijedi.

Kabeli kao negacija

Mada je i sve do sada rečeno bilo sasvim neobično i neuobičajano, kabeli koje 47 Laboratory preporučuje i isporučuje za korištenje s 4706 Gaincard pojačalom, su nešto na što se svi audiofilski s dužim stažem, nagledani kojekakvih spletova žica složenih konstrukcija, čudnog izgleda i ustroja, jednostavno moraju nasmijati. Prvo, kabeli, koji su također djelo tandema Kimura/Teramura, nazvani Storatos ili 4708 OTA Kit, su krajnje jednostavni - jedan puni vodič promjera 0.4 mm umotan u prozirni, plavkasti, razmjerno krut i debeo PVC omotač. I to je sve! Jedino što u njima ima neke veze s audiofilstvom i audiofilskim poimanjem kabela i što kompletno ne dezavuiraju cijelu svrhovitost suvremene kabelaške filozofije i tehnologije je bakar s malim primjesama kisika (OFC). Za svaki kanal koristi se po jedan odvojeni vodič za "plus i minus" komponentu signala. Drugo, istovrsni se kabeli koriste i kao zvučnički i kao interkonekcijski. Treće, ni u jednoj od aplikacija na krajevima nema (uopće, ili pak nisu standardni) terminala - u 47 Laboratory tvrde da se na lemljenim kontaktima gubi sva sila informacija. Pa kako se onda Gaincard pojačalo spajaju sa zvučnicima odnosno izvorom zvuka? Za zvučničke nema problema. Jednostavno se 4 jednako dugačke žice na krajevima ogole od plastičnog omotača i po dvije za svaki zvučničnik spoje na plus i minus izvode i tako na drugome kraju, na pojačalu. Naravno, za bi-wiring količinu kabela treba udvostručiti, a na kraju prema pojačalu međusobno "ufrkati" dva po dva kabela. Ali što je s linijskim izvorima zvuka? Nazočnost RCA konektora na pojačalu sugerira uporabu cinch kabela. Međutim, rečeno je, nema lemljenja, pa nema ni cincheva. Nije jednostavno opisati kako je to kod Storatos kabela izvedeno, ali pokušajmo. I slika će, nadam se, malo pomoći. Dakle, imamo dva sasvim odvojena vodiča, čiji su krajevi ogoljeni od plastične izolacije u dužini od 3 cm. Na krajeve jednog od dvaju kabela ("živi" vod) navuče se u sredini probušeni, bijeli plastični nastavak jednakog promjera onome u unutrašnjem dijelu klasičnog muškoga RCA konektora, i preko njegova vrha jednostavno presavine dio žice koji ostane viriti izvan nastavka. Krajeve drugoga kabela (povratni vod, masa) ugura se u rupicu na obodu crnoga prstena koji po svemu slični plaštu cincha, i preko njegovoga ruba također presavije dio žice koja ostane viriti. I tako su kabeli "terminirani". Bez trunke lema. E, sad se "muški" dio kabela ("živi" vod, dakle) provuče kroz središnji otvor prstena i ugura u otvor ženskog cincha na pojačalu odnosno izvoru zvuka i potom, preko vanjskog dijela (ženskog) cincha navuče crni plastični prsten. Ako se nadate da će nakon toga odmah iz zvučnika doprijeti zvuk, malo ste preoptimistični. Budete imali sreće - hoće. Ako pak prste umješa Murphy, tada ćete morati probati više puta. I što će audiofil više pokušavati to će se u njega sve više uvlačiti crv sumnje i nepovjerenja prema takvome, u biti, zapravo, ingenioznome, rješenju. U međuvremenu pitat će se, kad i ako uspije ostvariti kontakt, je li on maksimalno dobar, neće li se usljed njegove (ne)kvalitete i mehaničke (ali i kemijske) nepostojanosti pojaviti brujanje, zujanje i sličan audiofilski horror kao normalna posljedica lošeg spoja. Međutim, čak i kad uspije otprve dobiti zvuk, pa čak s njime bude i zadovoljan, prokušani audiofil ipak neće mirno spavati uz Storatos kabele. Jer, naslijeđeno iskustvo s masivnim cinchevima iz najčišćih neoksidirajućih metala, pritezačima za bolji kontakt i sličnim čudima kabelaške tehnike, neće im dati mira. Pitanja o valjanosti kontakta u samo jednoj točki/crti (na mjestu gdje se žica dodiruje s cinchevima), svijest o lakoj oksidaciji žica, mogućnost povećanog upliva RFI i EMI smetnja, proganjat će audiofila do u beskraj. Neki će se od njih vjerojatno smiriti kada uoče da sa Storatos kablama mogu ostvariti samo dva stanja: - a) šuma ni bruma nema jer nema ni kontakta, i b) šuma ni bruma nema ni kad je kontakt uspostavljen. Kad se ostvari "b" slučaj tada će audiofil doživjeti nešto posebno. Naime, sve što ste do sada čuli iz gotovo bilo kojeg high-end uređaja i za što ste bili spremni dati ruku u vatru da je potpuno bešumno, prava je buka, galama, urnebes prema onome što se "čuje" iz Gaincarda i ovakve, na prvi pogled neuvjerljive i traljavo izvedene i spojene kablaze. Bez obzira bili potencimetri za glasnoću potpuno stišani ili otvoreni do kraja, bio mute uključen ili isključen, kad na ulazu nije bilo signala, iz pojačala/zvučnika dopiralo je uvijek jedno te isto - veliko, tiho, prazno i mračno - ništa! Apsolutna, zastrašujuća i uznemiravajuća tišina koja je iz temelja potresala dosadašnju spoznajnu arhitekturu. Jer, do sada je barem tako bilo, gdje ima struje tu mora biti i nekakvih nus-pojava. Međutim, ne i kod Gaincarda i Storatos. Kao da radi na baterije ili se čak napaja nekom metafizičkom, nematerijalnom energijom. No, da ne bi bilo prevelike mistifikacije, i s veći-

nom vrhunskih zvučničkih i interkonekcijskih kabela bilo je isto. Međutim, svi kabeli iz nižih kvalitativnih razreda unosili su nekakav šum koji se kod većine drugih implementacija nije mogao razaznati kao njihov vlastiti, već se utopio u inherentnom šumu sklopova koje su povezivali. Iz toga slijedi, dakle, da je na Gaincard pojačalo moguće spojiti bilo koji linijski izvor zvuka, bilo kojim klasičnim kabelom s RCA završecima. Naravno, i svaki zvučnički, samo ako na kraju prema pojačalu ima razmjerno male viličaste terminale.

Zvuk kao senzacija

Dugo sam slušao Gaincard/Humpty kombinaciju. Dulje nego bilo koje pojačalo u posljednjih nekoliko godina. Slušao sam ih s nekoliko malih i velikih zvučničkim kutijama. Zašao sam mu u dušu. A on meni pod kožu. I tako je nastao tekst o neobičnom pojačalu koji će, sve govori u prilog tome, biti prvi takve vrste objavljen u nekom komercijalnom časopisu u Europi, pa i svijetu.

Nije nikakva novost, jer to se već i iz niza detalja iz uvoda dade iščitati, kažem li odmah na početku da sam ostao iskreno zapanjen nakon što sam, jedva dobivši zvuk iz njega, čuo kako zvuči ovo minijaturno i minimalističko pojačalce, koje je k meni stiglo ne baš sasvim, ali već prilično uigrano. Pustio sam ga par dana da "raducka" i osluškivao iz prikrajka. Kad su mijene, poslije sedmodnevnog rada, sasvim nestale, posvetio sam mu se do kraja. Prvo na što pokvarena mašta čovjeka natjera (barem je sa mnom tako!) je da čuje(m) koliko glasno može pojačalo svirati. Tim više što je manje i slabije!? Naravno, uz dužan oprez i stalno dežurstvo uz potencijometar za glasnoću (u slučaju Gaincarda, dva). Najprije manji glazbeni zalogaj. Podigao sam razinu glasnoće do stupnja kojeg nikada ne prelazim, i - ništa. Nitko ne bi pogodio da se zvučnici napajaju s 2 x 25 W. Sve je bilo na svojem mjestu, a glasnoća je bila iznad normale. Nisam imao strpljenja dalje stupnjevati materijal po zahtjevnosti. Najprije nešto manje složeni simfonijski komad, pa kad se ni tada nije dogodilo ništa što bi "pomaknulo" Gaincard, a onda "udri" po njemu simfonijama Stravinskog, Šostakoviča, Wagera, Mahlera, Prokofjeva i ostalim velikokalibarskim oružjem iz simfonijskog arsenala, niži operu za operom... Bez pretjerivanja, čaroban je to osjećaj i iznimno iskustvo kad se doživi da 25-watno pojačalo tako suvereno reproducira složenu glazbenu strukturu, točno iznosu njegovu teksturu, dobro slika dinamičke kontraste, kontrolirano iznosi najdublje (solo!) dionice kontrabasa i prenosi udare timpana i koncertnog bubnja. I to radeći sa zvučnicima koji su 100 puta veći i teži od njega. Pritom ne da ne posrne, nego zvučnike "tjera" tako uvjerljivo da se nakon početnog straha za opstanak pojačala počnete pribijavati za integritet zvučnika! Naravno da se, nakon što se priberate od šoka, krenete "osvetiti" tom samuvjerenome, malome divu, "kljukajući" ga bezobrazno najsloženijim glazbenim štivom koje vam dopadne šaka. Nešto kao kad osmoškolcu, koji vas je iznenadio i zaskočio neočekivanom obaviještenošću lucidnošću i koji kao od šale istresa sadržaj školske lektire koju ste vi već odavno zaboravili, pod nos gurnete djelo nekog suvremenog nobelovca, ne biste li ga postidjeli. Međutim, ovaj naš "žutokljunac" nije "truba" nego vunderkind. Ne ruši se on ni kad ga se "ošine" najsloženijim orkestralnim komadima glazbe. Doduše, tada ne "trga" zvučnike i malo se više muči, posebno mu pri iznošenju kompleksnih i glasnih vokalnih dionica kad mu malo zna izmaknuti kontrola u visokom registru, pa povremeno gubi uljudenost, finoću i rafinman, ne prežući da se, kad mu je panika, "dere" (upomoć!) Međutim, bas ne pušta s lanca kontrole, iznosi ga do kraja i točno, iako više ne onako autoritativno i masivnim kakav u stvari jest. Jednostavno, podreže mu donji ekstrem, "smanji"ga i "olakša" i vozi dalje kao da se ništa nije dogodilo. Pod takvom torturom, "slože" se ili barem dobrano oznoje i mnoga pojačala deset puta veće nazivne snage nego je Gaincardova. A Gaincard je nakon svega imao tek nešto malo povišenu temperaturu.

Kad pojačalo, od kojeg, ruku na srce, sve to, ipak, nije bilo za očekivati, prođe takvu testnu kalvariju i obilato nadiđe i ono o čemu se nije moglo ni sanjati, tada svaki daljni entuzijamam onoga koji testira naglo splasne. Jedino što tada preostaje je da se uživa u svemu onome što taj neobičan sklop može. Tek povremeno osluškujući i bilježeći elemente zvuka koji nisu uobičajeni i svakodnevnici. I da se pozovu prijatelji-audiofili da se i oni napiju iskustva s ovog rijetkog izvora.

Zvuci koji su iz zvučnika hranjenih signalom iz Gaicarda punili sobu bili su bogati detaljima od vrha do dna spektra. Dobar dio tih detalja nisam nikada uspio čuti s mnogim pojačalima znatno većeg re- nomea i više cijene nego je Gaincardova. A bogatstvo detalja nikada nije bilo samom sebi svrhom, niti plod naglašene analitičnosti. Naprotiv, opći tonski kolorit ovoga pojačala mogao bi se označiti toplim. Ipak, najtočnije je opišem li ga ne baš uvijek lako obranjivim terminom, - neutralnim. Najbolje se to može osjetiti pri reprodukciji kvalitetnih klavirskih snimaka. Lijep primjer je disk Pope Musica "Entangled Devotions" na kojem Naum Starkman izvodi dva Beethovenova remek-djela: 5. klavirski koncert (Emperor) i klavirsku sonatu br. 14 (Moonlight). Tako suverenu reprodukciju tih dvaju prekrasnih i složenih djela, takvu autoritativnost prezentacije, tonsku korektnost i gotovo životnu uvjerljivost nije lako doživjeti s konvencionalnom amplifikacijom. Još da se u vršnim trenucima nije gubio osjećaj am-

bijentalnosti i da dvorana u tom času nije zazvučala kao studio, moglo bi se govoriti o teško nadmašivom doživljaju.

S Gaincardom većina dobro snimljenih glazbenih prodložaka zvuči naglašeno realistično, otkrivajući svoju dramatsku napetost i podastirući pred slušatelja svu raskoš svoje unutrašnje poetike. Zvuk u cjelini plijeni autoritativnošću, driveom, tonskom uvjerljivošću, brzinom, eksplozivnošću i pokrerljivišću. Posebno su naglašena njegova lepršavost i prezentnost koje čini da se i najsloženija djela doimaju nekako lakšima za slušanje. Nije to po tonskom koloritu i prirodi zvuk SE trioda. Gaincard nema njihov "hipnotizam" niti je tako naglašeno protočan. Ali to je i gotovo jedina razlika među njima. Gaincard zvuči nešto svijetlije i analitičnije, SE triode nešto tamnije i koherentnije, ali dobar dio osobina dijele - vladanje ritmom, rezolucija, transparentnost, slikanje dinamičkih kontrasta i nadasve muzikalnost, gotovo su im identični. Gaincard zvuči čvršće, točnije, artikuliranije, kontroliranije u basu, preciznije slika detalje i točnije iznosi tonsku teksturu nego SET pojačala, . SET-ovi bolje prezentiraju glazbenu strukturu, prirodnije zvuče u najvišem registru, dublja im je zvučna slika, nemaju naglašenog pesencea, tamnija im je pozadina, eufoničnija su. Međutim, ni Gaincardovom načinu prezentacije prostornih komponenata zvuka, primjerice, ne može se puno zamjeriti. Slika, doduše, nije tako raskošno duboka, ali sve konture pozornice lako se uočavaju, izražena je reljefna struktura orkestra i točno naznačena pozicija instrumenata. I pri iznošenju najglasnijih orkestralnih pasaža, slika koju crta Gaincard ostaje postojana i naglašeno koherentna.

Moglo bi se još dugo i naširoko tako raspredati o svim zanimljivostima koje sam doživio baveći se Gaincard pojačalcem. No, negdje se mora stati. Za kraj, da se kompletira slika, dobro je kao zanimljivost navesti mogućnost pretvorbe Gaincarda u pravo dvostruko mono pojačalo dodajući mu joj jedan Power Humpty napajački sklop s čime se i ono malo mana dodatno umanjuje. Ili pak da se radi o integriranome pojačalu bez (klasičnog) pretpojačala, koje se može koristiti i s kakvim drugim pretpojačalom ako se želi povećati gain... Za kraj i riječ o cijeni. Odnosno o onome što se dobije za plaćenu cijenu. Stavimo li cijenu Gaincarda i njegovu snagu, njegovu radnu pouzdanost i praktično "vječnost" u kontekst s triodnim cijevnim pojačalima, tada svaki uloženi cent u Gaincard ima svoje puno opravdanje.

WAM magazin, broj 3

A trannie amp with a difference...

Product: Lab 47 Gaincard Amplifier and Power Humpty power supply.

Reviewer: Geoff Husband

Intro

The world of hi-end amplifiers is getting a little predictable. It's generally easy to categorize a given amp. There's the 'muscle amp', a transistor monster with massive power supplies weighing as much as a mini and with a 10mm thick frontplate. The equally chunky transistor class 'A' job, which matches the muscle in everything but 'paper' watts. Then there's the valve brigade, either in glowing push-pull mode, or the 'holy grail' a single ended job with a baker's dozen of watts, massive transformers and a milk bottle sized valve 'lighting up the darkness'.

The Gaincard isn't like that. Like so much interesting hi-fi it's the brainchild of one man - Junji Kimura. It also comes with the obligatory philosophy course such products need... It's a small, unassuming thing the size of two cigarette packets. Exquisitely made of just a front and back plate in black CNC machined alloy. Between them lie two matchbox sized aluminium extrusions, each side containing a complete monoblock power amp. Many amps claim to be 'dual mono'. In my book that means you could take a hacksaw to the thing, split it in two and it'd still work. The Gaincard is such an amp. Yes this is the most oddball transistor amp I've yet seen.

Actually there's a cheat here as offboard there's a beautifully machined, barrel shaped power supply. The 'Power Humpty' (what?) is shared between channels but can be doubled up to give true monoblock operation - at a price. It's rated at 170va about what you find in a decent 200 pound integrated, but it's the quality of the transformer and regulation that matter.

So why the tiniest power amp on the planet? Well the thinking is that by making the amp simple and very small, signal paths, particularly the feedback loop, are very, very short.

The result are the two matchboxes, each containing just ten components (the op-amp counts as one though), including a 12 step attenuator and a mute switch. Yup! the Gaincard can be used without a preamp - just don't expect to impress the neighbours when they see the set-up...

This is a bit of a disservice to the Gaincard. Both amp and power supply are beautifully put together, it's just that friends nod sagely when I tell them the glowing chrome and polished wood of my Audion power amps cost 1500 pounds, their reaction on hearing the gaincard costs over 2000 pounds is usually "What!"...

Here I'm not going to bore you with more technical stuff, Werner has already agreed to do that in a 'second opinion' review where he'll do his usual disembowling. All I'll add is that the Gaincard is claimed to give 25 watts per channel in class A/B. Other commentators have surmised that most of these are class A. Personally my experience of amps that are heavily biased towards class A is that run very hot. The Gaincard stays very cool even if left on all the time. In the distant past I used to keep my takaway warm on the heatsink of my old Musical Fidelity A1 25 watt class 'A'...

Sound

Well first I'm going to have a couple of bitches about the Gaincard. First it's so light that you have to be careful how you route cables otherwise they'll literally suspend the thing in mid-air, not a problem you get with Krell's I'm told... More seriously the speaker cable binding posts (I use the term lightly) are a joke. A non-conducting bar runs across the back of the amp into which four 'phillips' cross head bolts are screwed down. You've guessed it, you have to cram ralcatrant strands of cable under these. The whole thing is a disaster area - give me those cheapo cable clips rather than this any day! Failing dismally to get enough FFRR strands to sit under the bolt heads I went out and bought some flimsy gold plated spades and soldered them up. Decent, chunky, 'professional' spades wouldn't fit...

Feeling decidedly grumpy I wired the 47 into my IPL S3MTL's. I tried it direct from my CD and then through the Audion Silver Knight pre, a test that confirmed what a neutral pre-amp the Audion is and I continued to use it for the rest of the test. What greeted me was a sound not a million miles from my Audions. It easily matched them in detail and sound stage. The tonal balance was a little drier, different enough to identify from the next room. On the other hand there was a certain loss of energy. My kind of music generally revolves around classic rock with excursions into Blues and Jazz. In all these

the Audions just seemed to have more punch, more drive, more get-up-and-go, the sort of thing that keeps me up late at night playing music...

I suppose at this stage I'd call it 'honours even' with a slight bias towards my preference for dynamic kit. So a decent review would follow.

The problem was that this little baby comes with a BIG reputation. I was sent a wad of reviews by the central European distributor Sead Lejlic. All were from the US, and at least two of them compared the 47 to the very best amps money can buy regardless of price. Both mentioned it in the same breath as the AN Ongaku, a single ended valve masterpiece selling for 60,000 pounds. Even allowing for journalistic hyperbole something here wasn't quite right. One of the reviewers used to be the US importer of AN amps, and lived in daily contact with the Ongaku so he ought to know. So what to do...

Well first no component gets a good review just 'cos the world likes it, but I knew there just had to be more to come. I contacted Sakura Systems the US distributor, because I suspected first that speaker cables might be critical, particularly considering the odd connections. Secondly I wanted to play around with speakers.

So a couple of weeks later some Storatoc cable arrived and like everything else from Lab 47 it was weird. It consists of very pure copper, a single 0.4mm strand surrounded in some hard plastic insulation. The copper is very brittle and of course each speaker requires two of these to make a run - the strands being completely separate. And here an apology. If the Gaincard was designed with these cables in mind and surely it was, then those binding bolts are the perfect connection, squeezing the one strand hard onto the wire coming from the power amp - perfect and minimalist. This cable tightened the bass up a little and actually improved the extension, but I still thought it a little 'polite' for my tastes.

The IPL's are a pretty easy load, transmission lines tend to be and my Audion was quite happy driving them on the 8 ohm tap. But they are only about 87 dbL efficient. Don't get me wrong, the Gaincard managed to get them to party level, it just didn't get them to boogie:-) Here a big thanks to Cabasse who had left their Sloops with me on long term test. I don't use these normally because I miss the slam of the IPL's when it comes to rock music. They are better than the IPL's in many areas, but in the end I'm an ageing 'rocker'... One thing they do spectacularly well is produce volume for watts. The Sloops are 94.5 dbL efficient, and that is a true figure rather than the usual wishful thinking some manufacturers indulge in. To put that into perspective it means you can have a party with 5 watts.

So I wired them up. Something went 'click'... Over the next three days as the Gaincard warmed up it just got better and better. Here it started to make me feel that the Audions were manipulating the music. Where the Audions seemed to be putting a warm glow over everything the Gaincard seemed to be leaving everything untouched. A lowered noise floor, that darkness behind the music, became more apparent. At times it made the Audion sound just a bit uncouth. On the other hand that boogie factor had arrived in spades, the timing on tricky tracks like 'Los Lobos' 'Be Still' dropping into place. Bass lines became lightening fast. The bass notes in Dire Strait's 'Ride across the River' stopped like they'd hit a wall, the 'drop out' on 'Hotel California' became a chasm.

Then the detail. As always it's multi-tracked vocal that benefits most. That extra backing singer, the half heard harmony that suddenly leaps out at you so clearly you can sing along. On 'Simply Red's' 'Sad Old Red' the cymbal and hi-hat that run through the song shimmered and decayed in a natural way, the lovely fruity bassline pulling the music along with it.

The combination was very good, good enough to match the Audion/IPL combo in my effections. The remaining problem was really down to a rather dry, mid forward balance. This I didn't blame on the Gaincard, it's a characteristic of the Sloops, though my favorite cartridge the recently retipped AT 33e is bright and pushy.

Someone up there must be on Lab 47's side (and mine) because in the last week I had the amp, a parcel arrived at chez nous. In it was the long promised return of the Dynavector XV-1 for long term test. If you want to know how good this cartridge is read my review, but suffice to say I've not heard anything as good. More to the point it is a immensely powerful big sounding cartridge.

At a stroke the system gained the balance it had lacked. Female vocals took on a realistic body, a warmth that I consider natural returned. Sade's voice on 'Your love is King' was warm and breathy, standing out plainly in front of the band, but you could tell she had 'no voice' - in an acoustic age she'd never have made it. The Sax had body and power but you could hear the dampness of the reed. A double bass isn't just a string vibrating, it's a big reverberent wooden box - listening to 'Take Five' that's exactly what you got.

Here I was getting the best sound I've ever heard in my home. The system seemed to get the best out of every disc, it wasn't like a 'sword of damocles' waiting to strike down poor recordings. Take Ma-

donna for example. 'Ray of Light' gets my vote for being the 'Recording Most Likely to Have Been Made Through a Sock'. It's obviously been mixed for those morons in Ford Fiesta's with the sound of a six foot bass drum banging out of them. It's all boom, boom, boom. You know the thing, like when your neighbours are having a party. With the XV-1/SME/Orbe/Silver Knight/Gaincard/Sloop combo it just opened out and sounded punchy, fast and exciting - a huge transformation. At the other end of the scale her 'Like a Prayer' can be fiercely bright, yet here it never grated - sure it was much brighter, but once you'd adjusted it still sounded 'right', with the 'He's' count on 'Till Death Do Us Part' a full 5 out of 5.

As I write on my Laptop I'm listening to the 'Pretenders' 'Get Close" and a cymbal is ringing in the room, seemingly from behind - this is heady stuff indeed. The speed of the drumkit On 'How Much Did You Get' phenomenal. Sorry back to the review...

Then another box arrived a day later. A pair of the new Euroacoustic EH-140's (review to follow). These are big two-way floorstanders of about 87 dbl efficiency. Wiring them up the Gaincard went 'polite' again... The Audions gleefully pulled their trick of kicking them into life just as with the IPL's. Again it wasn't a question of loudness, just that the Audions managed to inject fire into proceedings.

Here I'll put up my own theory... I think the Gaincard is not biased towards class 'A' - anything that changes it's temperature only by a fraction cannot be. But I think that a few, perhaps even one or two watts are class 'A' and that these are some of the best watts in the business regardless of cost. The other 23 or so are there to party with when quality isn't so important. A speaker like the Cabasse will rarely need more than those two watts, others will draw on the 'second team' more often. At it's best it is just stunningly transparent. It's got the magic midband of good SE amps, though it doesn't sound like them - no added warmth or colour, but it produces more watts than almost any SE valve amp.

Conclusions

This has been a long review so I'll try to get to the point. The Lab 47 Gaincard is the nearest thing to the 'length of wire with gain' ideal that I've ever heard. But it is not an alrounder. Anyone buying this amp and using it with unsuitable speakers will wonder what the hype was about. It'll sound good, but not great. What's unsuitable? I suspect that though the Gaincard will drive inefficient speakers without problems it really needs very efficient speakers to spread it's wings. I only had the Cabasses to hand, but coupled with a meaty front end I think they're a match made in heaven. Here you are going to have to rely on your dealers knowledge and trust them and your ears. They will have favorites of their own and I hope more knowledge than I on how to get the best from the beast, though high efficiency speakers tend to be bass light. As for the front end the XV-1 is nearly as expensive as the Gaincard but if you need something cheaper the V15 or Dynavector DV-20 will give the balance if not the ultimate ability. The snag here being to find a CD player to match that warm balance.

Where does that leave me? The Gaincard may not look good value for money from a distance, but right now it sounds a bargain and I'd dearly love to keep it. Giving up the Gaincard and it's capabilities is desperately hard, but in the final analysis I can't afford two amps and the Audions are just better alrounder. In writing for TNT I have to have kit that biases test results as little as possible. The fact is that the Gaincard will (I believe) skew every speaker test towards the most efficient and highest resolution design. If my system was fixed at the combination I'm listening to at this moment I just wouldn't be able to give the Gaincard up. Sadly we all have to make sacrifices...

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Distributor's comment

It is my pleasure that TNT got the chance to have 47Laboratory Gaincard amplifier on review among the first in Europe. It is my strong opinion that the independent audio journalism needs support from audio industry and for me, it was no question whether or not to meet the request that we got from you for a review of our amplifier.

Contrary to many other high-end brands, we try not to make an aura around 47Laboratory products. We are happy to let people hear it and hopefully capture some of the excitement that goes with such experience and which all of our customers share with us on a daily basis, together with passion that evolves from the first time excitement.

Having 47Laboratory Gaincard reviewed by TNT was a challenge. Gaincard comes to Europe with an exceptional reputation in Japan and, these days, in USA.

It is never an easy task to get yet another positive review, regardless of how easy that might look. People expect miracles and the criteria gets tougher and tougher and, sometimes even real miracles slide out of perception.

It is a normal psychological thing and passing such criteria with stellar comments is very much rewarding.

Indeed, I find your review very positive and I am very pleased that you've managed to recognise some of the beauty Gaincard has to offer. I am glad you've enjoyed it.

I deliberately say "some of the beauty" as fascination with 47Laboratory is something that takes time to develop, the time that reviewers usually don't have. It is in the nature of reviews that they are linked with time schedules, frequent configuration changes without enough time for a component to "settle in". I guess, readers are oftenly disregarding audio reviewers as a hard working people :-)

When sending me the draft review, you asked me to be critical about it. Why? I don't see any reason to be critical to a fair and honest review! My understanding is that Werner will make a second opinion review on Gaincard and I am very confident to say in advance that I'm sure it will have all the honesty one can look for, too!

It is exciting and very positive thing to have views on the same products from different perspectives, oftenly opposed preferences, tastes and priorities and not from the perspective of the ultimate authority as such doesn't exist.

I understand your concern about Gaincard's ability to drive speakers of medium efficiency. I guess that very much depends on the room size. Some of the best sounding setups with Gaincard are with high and, surprisingly, medium efficiency speakers.

Still, for the difficult loads (much more in the terms of impedance instability than lower sensitivity), as of April 5th, there is more powerful, 50W version of Gaincard available and we hope it will expand further, already quite long list of speakers that we've found Gaincard to be compatible with, or, allow me to use your words, with whom Gaincard makes "click".

It comes not as replacement to existing 25W version Gaincard but as an "reinforcement" to 47Laboratory line of products.

At the end, I would like to emphasise the issue that you've mentioned in your review - the importance of audio dealer knowledge as the factor of crucial importance in helping customers in selecting audio systems that will suit their needs and passion for music.

What makes a good dealer is knowledge and commitment. 47Laboratory, being well aware of that fact, is quite selective, both in terms of distributor and dealer selection - we strongly believe that any brand with non-plus-ultra aspirations owes equally good treatment to their customers.

I wish you and all at TNT the best in your future work.

Best regards,

Sead Lejlic - Konus Audio Systems

47 Labs Gaincard amplifier - second opinion

Is "47" the answer to the ultimate question of life, the universe, and everything?

Reviewer: Werner Ogiers

At the beginning of this year I got fascinated by the glowing reports on that funny little sand-based amp, the 47 Labs Gaincard. Since low-powered amplifiers with high-end ambitions simply have to pass the test of making nice noises with the old Quad electrostatic loudspeaker, I decided I was obliged to try and get my hands on a Gaincard. Inquiry at Sakura Systems, USA, however, revealed that our own Geoff already had gotten there before me. Tough luck.

No. Good fortune! Geoff arranged with Sead Lejlic of Konus Audio, distributor in Bosnia and Herzegovina (the world really is getting a small place, hence everyone's interest in a small amp!) and formal owner of TNT's Gaincard demo sample, that the little box could come to Belgium after he was done with it. But more. We needed a short break, and already had decided on the Normandian and Breton coasts for that.

1 + 1 = 2, which lead us through the land of Celts and to the front door of the Husbands.

Listening One - Living as a God in France

We had the chance of auditioning the Gaincard at Geoff's place, over a two days time, and combined with some leisure biking. And I agree with Geoff's findings. With the ultra-efficient Cabasse Sloop speakers the little 47 Labs box played incredibly dynamic and lively, while keeping things subtle and detailed as well. When confronted with an unfamiliar system or room my poor brain initially doesn't decode image depth and such well, but at the second day there was plenty of depth, and there was a wide soundstage, and there was sheer realism, this courtesy of some excellent 1950s recordings re-played on a turntable costing more than our new Ford Fiesta.

Reverting to the Audion valve amplifiers we all found that there wasn't much difference with the transistor Gaincard. However, substituting then the big IPL transmissionline speaker for the Cabasses, I firmly preferred the newer, warmer sound, but that is because I really don't like a forward midrange, as generated by the Sloops. Still, apart from tonal balance, the combination of Michell Orbe with Dynavector cartridge and head-amp, Audion pre, Gaincard, 47 Labs wiring, and Cabasses did sound truly special. (As an aside, let me remark that those IPL kits are awesome too, playing in the multi-1000-Euro league!)

Listening Two - Disaster Area

I then took the Gaincard to a friend of mine, a dealer, distributor and music lover. I had specified a system to be set-up there in advance, comprising of a Orbe/SME V/Allaerts MC-1, Delphini, Orca, Alecto Stereo, and B&W Nautilus 802s. I wanted the 802s as they are 92dB sensitive, and I've heard them before do nice things with the puny 12W of the Synthesis Nimis tube amp.

Now what surfaced in the end was not quite what the doctor ordered. A prospective customer needed a demo of another big turntable later that day, and so the Orbe remained in the mothballs. Normally this would have been fine with me, but that unnamed other record player so embarrassed itself that we had to fall back to a CD-player to get any decent sound at all: out with a Musical Fidelity A3CD. Oh, and the speakers were Nautili 803, at 90dB sensitivity.

With the CD-player directly connected to the Gaincard and things suitable warmed up, one problem was immediately obvious: S'es and sibilants lacked all control and ricocheted between the two speakers like a game of ping-pong. Could it be that the CD-player did not like the fairly low 20kOhms input impedance of the 47 Labs? Insertion of the Orca linestage cured this problem and from now on treble was as pure as possible (given the source).

All present agreed then that the Gaincard emitted very nice and musical sounds, and often reference was made to typically tube-like dynamics (or lack thereof) but with a lot of depth and subtlety. Yet, my host wasn't fully convinced, and some switching between the guest amp and a cheaper yet more muscular 70W class AB power amp followed. The verdict that emerged was that while the big-one had a slight sheen colouring its proceedings, and the Gaincard was very similarly off in the other direction, being a bit greyish, the unnamed big-one exerted more control in the bass, sounded a fuller, was more lively overall, and yet did not lose out against the Gaincard in the subtlety department.

Yes, we got good sounds with the 47 Labs, but we had to include a preamp to get there, and moreover a cheaper power amp in residence did even better.

I should have known better. The B&W 803s may have a nominal impedance of 8 Ohms, I actually also know that between 100Hz and 300Hz they have a serious depression to only 3 Ohms. Small wonder that a tiny amp sounds a bit thin...

Listening Three - Home Sweet Home

My turntable was non-operational due to some surgery - I am fitting an SME IV tonearm, and what with the phonostage in desintegrated state? - so the listening was to be done with CD only. I used the fine Hawk MP-DAC, which I expected to complement the Gaincard well, with its warmish and lush sound. It did.

After three days of continuous warm-up the 47 Labs amp yielded a very transparent sound that laid bare everything going on in the music, and this without grain, without trace of electronic artifice. The soundstage was exemplary, wide, deep, and open, this to a degree I hadn't experienced before at home.

Tonally it was light, with a fierce but clean treble and a lean bass. A very interesting bass: what it was lacking in weight and warmth it made up with well-defined contours and a remarkable tightness. Compared to this presentation my usual electronics seem to have a terrible overhang. Or should that be hangover?

Still, I did miss some body in the music, some bloom. Likewise, dynamically there wasn't much push, and for instance my antique Dynaco delivers just that: warmth, kick, and a lush bloom. This exemplifies that the Gaincard electrically may behave as a low-power triode amp, but sonically it is completely different. It is just as flawed as a little tube thing, but then again, it can be just as captivating, only in an entirely different fashion.

You see, while lightweight and pastel-hued, the sound had lots of musical interest. The flow of music, vocal inflections, subtle shadings, the complexity of rhythms, ... all were brought out in an impressive way. No, make that in a beguiling way.

After a while I found a method to partly offset the lightness of touch, the lack of grunt: for each and every recording one specific listening level 'clicked', made things sound more correct, more real than other levels. And when this particular level was within reach of the Gaincard, then bliss resulted. When the level needed was too high for the little amp, then all one could do was put back the disc, or move into a smaller room. This happened quite often, so my conclusion is that the Quad ESL can be a good speaker for the Gaincard, but probably so only in rooms smaller than our 4 x 8 meters.

Putting Things Into Context

So far I have not exactly been raving about the Gaincard. What then with all those extatic US reviews??? Let's have a closer look at them: Herb Reichert used the 4706 with Avantgarde Duo horns, Art Dudley (Listener Magazine) with Lowthers. Both highly sensitive designs that can strip wallpaper with only 2 Volts input. A far cry from Nautili or electrostatics indeed. And both reviewers commented on a certain dryness, and lack of a moist atmosphere. Indeed, again. Both found the music recreated through the Gaincard interesting and fun. Dr.Gizmo used Tannoys, and apart from stating that this was the transistor amp he likes most, while still not matching directly-'eated-riodes, he says nothing about the sound. Steven Rochlin gives it 95 points all over the band, but only 75 for sub-bass and 85 for mid-bass. Valerie-Anna-Log comments on a broad and deep soundscape, with plenty of detail and focus. Blair Rogers used Quad 63s, initially did not like it, and after a few weeks said that "if you were looking for tube sound, then look somewhere else, otherwise sit back and and let the 47 weave its delicate spell of silken thread". Ow, he also heard "deep, shuddering bass".

Apparently my own notions about dryness, lack of bass volume, and excellent detail and spaciousness are not far off the mark, and I should not fear being visited by a Ninja hit squad.

Fine. Excellent. Let's continue.

Listening Four - Coming to a Synthesis

At the beginning of the year I learned that the Synthese One, a legendary Belgian high-end loudspeaker from the eighties, was to be revived in an all-new version. And almost by coincidence I found someone who had just acquired a mint pair of the original Ones. With a benign impedance and a 89dB sensitivity these large four-way transmission lines promised to be a good match for the Gaincard.

More: the owner of these speakers expressed an interest in the 47Labs amp. So I did something I normally don't: perform part of a listening test in an alien environment. I hope you'll forgive me.

Again plagued by bad luck, none of my host's turntables were spinnable that night and so we reverted to a big Sony DVD player as source, piped directly into the Gaincard. I only spent a few hours there, so the following comments have anecdotal value at the best. The overall sound reminded me a bit of the Cabasse/47 Labs combination, only now sublimely neutral and with a tight and very deep bass. Dynamics were excellent too, and the Synthese speakers (I hope to review the MkII's soon) proved to be very transparent, with fine width and depth. I still found things a bit dry and bright, but keep in mind that I was in a strange room, one without much damping at that, and with a speaker I'd never consciously heard before. Nevertheless, a fine result was obvious, and the Syntheses clearly mated well with the Gaincard.

In the following days my host played on with this system, augmented now by a Pioneer CL-590/Dynavector DV-505/Shure V-15 vinyl setup (big Japanese direct-drive battleship of the sort Thorsten would approve of). He liked the Gaincard a lot with vinyl, commenting favourably on its precision. Conversely, the revealing nature of the little amp was too much for his poor Sony DVD and Rega Planet CD-player. Still, a decision to buy the 4706 followed soon after.

And the story doesn't end here. I got contacted by another Belgian loudspeaker manufacturer, Koen Vaessen, of \$10000 Aquarius fame, and after having listened to the Gaincard on his own designs, again very efficient wide-band speakers, he took up the distribution for the Benelux countries.

Conclusions

I admire the Gaincard, simply for proving that an awful lot of good noises can be made with just a pair of cheap power opamps. It proves something that is highly relevant to audio design. I adore its concept and the package it comes in. However, I do not love it, because to me (and in my system and with cabling that, I admit, did it injustice) the lack of bass and warmth moved it too far away from my tastes. In addition, its scope of application is rather limited: loudspeaker choice is critical, and not all sources are prepared to drive the Gaincard directly, without preamp (I experienced problems with two or three other sources). Then again, when things 'click' the Gaincard really is an effective integrated amplifier, and at no time did I find the twelve-step dual-mono attenuators a nuisance or an inconvenience.

Wrapping it up, 47 may not be the answer to everything (we all actually know that 42 is the real number ;-). But if you have wide-bandwidth speakers of high-efficiency and with a generous bottom end, coupled with a warm yet transparent source, then be my guest, for, when all is said and done, the Gaincard remains something truly special.

And Sead, man, do you have any idea how curious I'm now about the 4712 phonocube? Any idea?

This was a laborious review, and without the help from Sead Lejlic (Konus Audio), Geoff Husband (TNT), Philip Matthews (Hifi Corner), and Henk Catry, it would never have happened. So, thanks guys!

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47 Laboratory's System in Review

by **Steven R. Rochlin**

In this world of me too products, my first exposure to 47 Laboratory products was at a show over a year back. Eventually a review sample came my way followed by my full review of their Gaincard amplifier here on the Enjoy the Music.com Review Magazine in our September 1999 edition. Since then the Gaincard has been receiving much cyberspace ink with many music lovers true musical bliss. Below is a review of virtually their complete system including their rare phono cartridge which few examples are available. Is this system a diamond in the rough or are the folks at 47 Laboratory a one hit wonder?

I'll dispense with the basics that were covered in my review of the Gaincard as you can easily read it by clicking the link. Here you will find information on their Model 4712 MC Cartridge preamplifier, Model 4713 Flatfish CD Player/Transport and Model 4705 Progression DAC. Each unit needs its own Power Humpty. There are different power units which are needed to properly supply power to the 47 Laboratory products. Specifically, the two kinds of power supplies are the Power Humpty which is for analog gear (Gaincard and MC cartridge preamplifier) and the other is called the Power Dumpty which is for digital gear (Progression DAC and Flatfish). The Model 4706 Gaincard and Model 4712 MC Cartridge preamplifier can use one Power Humpty for both stereo channels or you can opt for two Power Humptys so that each stereo channel has its own power supply. Meanwhile the Model 4713 Flatfish CD Player/Transport and Model 4715 Progression DAC can use separate Power Dumptys for each unit or you could use only one Power Humpty to power both pieces. During the review I tried different configurations and feel that the Gaincard is best with one Humpty for both channels. Since I had only one Dumpty here, I reviewed the Flatfish and Progression digital sounded with one power Dumpty supply for both units while the MC preamplifier seemed to offer the best sonics with one Power Humpty. For those who are counting, that is four pieces of electronics with three Power Humpty-Dumpty (two turtle doves and a cartridge that's by MIYABI).

While the MC preamplifier is set at the 75db gain level, those with more challenging cartridges can order the 93db high gain version. This unique, yet expensive for its size, MC cartridge preamplifier looks like a cartridge itself! Like the Gaincard, there are totally separate right and left sections which hold the appropriate audio channel. These are mechanically joined by the main front and rear pieces to form the complete unit. The Model 4712 MC Cartridge Preamplifier is unique in that it is a current amplification device instead of the usual voltage amplification variety. According to Yoshi of Sakura System, the 47 Laboratory USA distributor, "The base of gain calculation is not the output voltage itself of the cartridge, but the output voltage divided by the internal impedance of the cartridge. For example, MIYABI/47 and Benz-Micro Ruby both have output voltage of 0.3mV, but the internal impedance of MIYABI/47 is 2 ohms while Ruby is 38 ohms. This means Ruby's final gain through Phonocube is 19 times smaller than that of MIYABI/47, and you'll need a high-gain version. Similarly, Lyra Lydian Beta has 0.5mV of output which is bigger than MIYABI/47 but its internal impedance is 4 ohms, meaning the base of gain calculation is smaller than that of MIYABI/47. You don't need a high-gain version for this, but you will need to crank up the volume a bit to get the same loudness. We recommend to consult us ahead if the customer is not quite sure which version will suite better with his/her cartridge." The standard gain unit worked fine with their cartridge and also my beloved Clearaudio Insider Reference Gold.

The Model 4705 Progression DAC is the model of simplicity. This unit offering only a single power lead, one S/PDIF digital input via female RCA connector and the standard right and left channel outputs via female RCA jack. The 4713 Flatfish CD player/DAC has a front and center orange display. This gives the track and time among other information needs. While there are buttons on the front top for display on/off, play, stop and track forward/back, a wireless remote control is included which offers many more functions. An interesting aspect with this unit is that the CD actually stays on the outside of the unit while a plastic acrylic-like threaded piece secures your CD onto the transport's motor. While the unit does have right and left analog outputs, I suggest avoiding them as only the usual 1-bit decoder mid-fi sounds seem to come from them. Being a transport there is not just one, but two S/PDIF digital outs via standard RCA jack. Here is where the intrigue begins...

The two S/PDIF digital outputs are different. Output 1, the leftmost jack, is DC coupled and is best used with the Model 4705 Progression DAC or other DACs which offer DC filtering. Why you ask? Because the DAC has a DC filter and therefore you do not need the transport to also have a DC filter as

this could compromise the sound quality. A note of warning as connecting a normal AC coupled DAC to the Output 1 may cause damage according to 47 Laboratory. The other digital output is AC coupled and good for normal DACs (Output 2). As i said before, 47 Laboratory does say that you can use the DC coupled output for other brands of DACs that have DC filtering, though at a resulting comprised sound, therefore use Output 2 for AC coupled units. The plot thickens!

Like the Audio Note Kit 1.1 DAC reviewed by me a few months ago, the Model 4705 Progressions DAC is of the non-oversampling variety. There is no oversampling used as is with virtually all digital to analog converters. The claim of 47 Laboratory and Audio Note is that the use of digital filtering is claimed to possibly cause smearing in the time domain among other things. As most people reading this know that jitter is another type of time smearing. The elimination of a digital filter can be, arguably, beneficial. A passive I/V conversion is used in the Model 4705 Progression DAC that is handled by a passive device. 47 Laboratory claims "The result is a superb transient response without any overshooting, and still maintains the output voltage of 2.1V." Like with their other products, the shortest possible signal length is achieved by arranging and mounting the parts as closely together. While not mentioned in my review of the Audio Note DAC Kit 1.1, due to using a simple filter design there is a drawback. Specifically, there is some signal that extends a fair amount beyond 20 kHz and therefore you may want to insure the rest of your system can handle this. Most systems seem to have no problems in this regard.

During this review i did also have the opportunity to enjoy the MIYABI / 47 MC cartridge. The designer of this piece, the legendary MIYABI designer Mr. Haruo Takeda, collaborated with 47 Laboratory in bringing this line contact stylus Alnico magnet design. MIYABI/4Ts aluminum alloy cantilever is claimed to "holds all the resonant energy inside and pours them into the phono-equalizer" according to the piece of literature i have on hand. The best sounding cabling for this system, as i did not have the 47 Laboratory Model 4708 OTA Kit, were the Kimber Select KS 3035 or Nirvana SL loudspeaker cables and KS 1030 interconnects. Loudspeakers used were the Avantgarde Uno or my beloved modified KEF 104/2.

All Systems Check, T Minus 3... 2... 1...

After the usual break-in process the first thing that grabbed me about this system was the ease in which the music was brought forth into my listening room. It was obvious that there was a synergy between the units. Of course this should be a given as when one goes with all the same manufacture for devices you are also hearing what they have intended. Mix and matching manufactures within a system can of course yield great results, though one could argue the no-brainer of simply buying a single manufacture system so that synergy is a given. The bass was deep, the imaging 3D, and the information brought forth from CD was just as mind boggling as with the Audio Note DAC Kit 1.1. Of course this leads to swapping DACs and comparisons which will be covered later in this review.

Using the KEF 104/2 with large scale concert music seemed to help prove that the days of 200 watt behemoth amplifiers are not needed when one chooses to use a properly designed higher sensitivity loudspeaker that presents a sane load. Hopefully the day will come when audiophile run out of town those loudspeaker manufactures who insist on making large units whose sensitivity is below 90 db and/or present unstable low impedances to their upstream amplifiers. Ok, so i have an axe to grind about these things, yet if they can make great high-sensitivity loudspeakers in the 50's and 60's, why is it some loudspeakers seem to have caused a de-evolution?

Using the digital dynamic duo together showed me some of the best digital my ears have ever heard from a single manufacture. While loading, er, um, screwing down CDs on to the Model 4713 Flatfish CD Player/Transport was weird to say the least. Then again every time i look at the diminutive-sized Gaincard amplifier i guess it all equals out in some strange way. While i did not heard a great difference between having the display lights on or off, i do want to note that the Flatfish most defiantly needs some form of resonant control.

The good folks at Bright Star Audio recently sent me some of their goodies and the Little Rock 1 did wonders to get the best possible sound from the transport. It was an improvement large enough for me to make the Bright Star Audio Little Rock 1 a virtually mandatory device with the Model 4713 Flatfish. Everything, and i mean everything was better resolved.

Analogue junkies will be wondering how can a small, weirdly shaped, light weight (and almost \$4k) MC phono stage sound good. If you have read my previous review of the Gaincard amplifier i have said the same thing. Well, how can i say this, when used with the Miyabi / 47 MC cartridge or my fave super-fi sell-the-house-and-kids priced Clearaudio Insider Reference you get analog that would make a grown man cry (or a dead man, um... Darn Rolling Stone flashbacks!). While the now famous inexpensive Lehmann Audio Black Cube, for which i was the first to break into worldwide audiophillia, has

been all the rave, i have a feeling those who are into top-notch analog just may be swooned by the Model 4712 MC Phono Equalizer. So what does this unit do that has me in Happyville. It does nothing.

No, i do not mean it does not work. What i am trying to say is that it is not a trip to tube euphoria nor is it a ticket to the Solid-Statelity Manor. It is the sound of one hand clapping. To be more review-like, it brings to the music what you put in front of it. It seemed to sound like nothing. i tried the unit using all non-47 Laboratory goodies to insure of my opinion here and it seems to be the most transparent thing my ears have heard for a phono stage. In fact i also never experienced any grounding problems, the dreaded nasty phono buzzing, high-gain hissing, tube roar, etc. during any setup i threw the unit into. The price will keep many an audiophile more as a wishing then an owning, though those who can afford such things really may want to audition the Model 4712 MC Phono Equalizer.

This leads us to an interesting conclusion. Could it be that, like the Model 4706 Gaincard, this MC amplifier, or shall we say amplifiers in general is 47 Laboratory forté? While i am sure that somehow there is some characteristic of the MC preamplifier, maybe it is so small a to deliver so much that i am at a loss of words? (Said in good humor) Hmm.. a review at a loss of words? Perish the thought! In the end there needs to be more investigation into this unit. Again, maybe amplification devices is what 47 Laboratory excels at. Back to the complete 47 Laboratory system...

When the Audio Note Ongaku was here, there was a sweetening of the highs that was ever so seductive. While as a system the 47 Laboratory products do not have the sweetness, they do have incredible smoothness. This is not at the cost of rolled off highs or lower of resolution. In fact there was an abundance of resolution. Could it really be that the use of zero oversampling is the key? On with the mix and match we go.

First let me state, as i have said before, the Model 4713 Flatfish CD Player/Transport on its own, using the analog output on the unit, is not what a \$5,400 digital front end make. We are talking about an impressive transport front-end with what sounds to me like a basic 1-bit DAC system. That is like placing a Pinto engine and transmission into a Ferrari 360 Modena. i would say the same about the Model 4705 Progression DAC. While i have a few unique customized transports here (read: tweaked out non-commercial units), none of them seemed to get the best from the Model 4705. The best sounds from this digital rig came when they were used together. it would seem 47 Laboratory agrees here as their special DC coupled output which is specifically made for their DAC seem to bring about the best sounds from both units.

In fact if i used the Model 4713 Flatfish with the Audio Note DAC Kit 1.1 i did get good sound, but not better than the 47 Laboratory combo. In fact the G-ds have graced my home with the \$uper ultra-expensive Audio Note DAC 5 (think five figures folks) that is also a zero-oversampling unit. It uses all silver goodies and more super-fi tweak parts in this one unit than is found in most complete audiophile systems. The same outcome still applies. Let me also say for the record that when the DAC 5 is used with my custom transports it is in another league way beyond the 47 Laboratory combo. Not just a small difference, but as though a whole new world was brought forth. i know another reviewer had one of these puppies in his system but his editor will not seem to want to open the zero-oversampling can o' worms. Guess dreams of those SACD and 24/96 numbers games fill their head. Digital, analog... it is the music that matters!

Speaking of analog, the Miyabi / 47 MC cartridge sounded wonderful in my usual non-47 Laboratory reference system (all silver wired ultra-tweak). Alnico magnets are used as one might expect in ultra-exotic Japanese stylings. The cartridge seemed to lean more towards the musical over the analytic side of things. While not overly so, the thereness in the midrange was glorious. Bass, while not the deepest i have heard as with my Clearaudio Insider Reference, it is available at less than half the price. The highs also seem ever so slightly rolled off. This seemed to also add to the cartridge's more relaxing sound as opposed to an overly edgy sound as found with lesser units. Image definition and soundstage ability was excellent. My sample seemed to sound best with a 2.2 gram tracking force as measured by my Clearaudio Exact stylus gauge. While one could make minor tonal adjustments through VTA and tracking force, the above comments are at 2.2 grams with the back of the cartridge ever so slightly (and i mean very slightly) upward.

Lift Off

How does one wrap up an equipment review that covers five different manufacture products that were also used separately? Dare i tell you how long this review really took or the pains in switching cartridges? When all is said and done i must conclude that 47 Laboratory's claim to fame could be within their amplification devices. While their transport and DAC and also very special, they must be used together to achieve the best from both. This is definitely where the sum is greater than its parts. Still, at just over \$8k for both i can not help but wonder what else may be out there which has never been here.. or to come in the day and ago of new digital formats. The Miyabi / 47 MC cartridge, on the other

hand does have some very special traits which i am hoping to further investigate (and maybe have a separate review of it to appear at a later time).

As a complete system you most certainly could do worse. Meridian system, while technically more sophisticated, never seem to sound right no matter how many different times i have heard them. You can add Cello to this list as i have been wined and dined by Mark Levinson himself. Yes, the Cello system are good, yet seem to strip away the humanness and soul in the music to my ears. Few companies make complete cartridge to loudspeaker systems... and there's the rub. Too many of us keep mixing and matching as we travel the world audiophillia hoping to find that magical combination that leads us to audio nirvana. With the 47 laboratory system i feel confident in saying that here you have an easy choice for those who simply want to forget about the system and simply... enjoy the music.

Tonality	90
Sub-bass (10 Hz - 60 Hz)	85
Mid-bass (60 Hz - 200 Hz)	95
Midrange (200 Hz - 3,000 Hz)	95
High-frequencies (3,000 Hz on up)	90
Attack	90
Decay	90
Inner Resolution	90
Soundscape width front	95
Soundscape width rear	95
Soundscape depth behind speakers	95
Soundscape extension into the room	95
Imaging	95
Fit and Finish	100
Self Noise	100
Value for the Money	80

Manufacture's Reply

Dear Steve,

Thank you very much for the extensive review of our products. I really appreciate your effort to bring accurate descriptions of products and the sound they make (or the sound they do not make!). While I enjoyed your mostly very positive comments, there is a couple of points I would like to make. The first one is that although you had almost all our products, cables were not included. I don't know why Yoshi didn't send it to you, but our products are very sensitive to the difference of cables and we use our cable through all product developments. Second is about the setting of Flatfish. As you found out, it is very sensitive to how, and on what, it is set. What we usually recommend is a very flat, solid surface without any damping materials between the floor and Flatfish. I haven't had a chance to try Bright Star products, but I'll keep it in mind.

After reading your review, I feel almost jealous of the situation in US that allows reviewers to compare the reviewing product with other brand's components and state their opinion honestly. Yoshi says it's not always the case, but you seem not to hesitate on the matter. Whether it is positive or not is an entirely different issue. Without comparison, who can say anything about value! Sadly, in Japan, the situation is far worse. The whole industry is in the same bed. Nobody says anything negative about anything. Reviewers are ranked by how much sales he/she can generate. Manufacturers can buy editorials and annual awards. Compared to that, the fact that you can write this kind of review and actually publish it with a response from the manufacturer is a lot healthier situation.

Thanks again, oh, before I forget, "the things that never been here", our flagship Pitracr transport will make it to US shortly!

Koji Teramura/47 Laboratory

Musical Fish - Charlie the tuner gets a new friend

Review by Herb Reichert

There is something unfair about me attempting to review a CD player. I mean, who am I--and what do I know? There's a billion or more CD players out there, and I've only heard a small handful: maybe two dozen different ones since the damn CD was invented.

Lately I've gotten to use two or three different players in my own system, and man, that's nothing. So even if I think the Flatfish is the best thing that ever played my CDs--who cares? The guy down the block may already have a better one at half the cost for all I know.

On the good side of this bad issue: I have, over the last decade, been the beneficiary of some astounding luck. God has brought me an amazing stack of the best high-fidelity equipment ever made. I used to laugh. Routinely I employed about \$30K worth of handmade hardware, just to spin records and pick up the signal from their grooves. Likewise, I've played my 100 or so CDs through about \$30K worth of digital equipment. And then there's the time I had a system worth about \$650,000. And then there's the 30ips master tapes, the 78s, and the trips around the world just to listen to someone's way-gone audio assemblage...

Okay, okay. I've used a bunch of the good stuff, and I may be able to recognize some above-average music playback when I hear it, but there is still no way I can tell you what's the best CD player, or even what the best CD player is at any given price level. All I can reasonably report on is whether or not a fool like me would buy this or that player--and possibly how long I think I could live with it without getting antsy for a better one.

Another reason this whole scheme is unfair: I must be a total sucker for audio equipment designed by Japanese guys. Many years ago I had a system that was mostly built by Shindo. After that, I imported Tango Transformers and Black gate capacitors. Then I imported Audio Note Japan. Meanwhile, I fall in love with electronics by my friends Uchida and Komuro. Next, I write a rave review of the 47 Laboratory "Gaincard" amplifier. And now I'm shameless enough to think you'll listen while I try to tell you why the Flatfish is the most satisfying CD front end I have ever used. If I were you, I'd just read this article for it's modest entertainment value and go out and buy whatever damn CD player makes you happy.

Actually, there's a third reason you shouldn't take my review too seriously: I have only given my phone number to two people in the whole audio industry. You see, I'm trying to change my life, and therefore I have concocted this very snobby rule that only "art world" people can have my phone number. I like this rule. It keeps me sane and out of the line of fire of a lot of airborne shit particles. I not only refuse to talk to audio professionals but I make every effort to write about only what Grand Master Art-D tells me to write about. (Truth be told, I'm a little out of touch with the latest developments in audio too. All in all, I'm probably the wrong guy's opinion to bet your kid's lunch money on.)

So here it is, I confess, the two audio importers that have my private phone number are Roy Hall of Music Hall and Yoshi Segoshi of Sakura Systems, the importer of the Flatfish. But!! I have a great reason for breaking my good rule for him. He is an artist. He paints. He studies art. And best of all, he has, in my opinion, amazing good taste in all things creative. I love to go to his studio and listen to music, look at art books, and talk about art. (His JBL loudspeakers aren't bad, either.) He is a wise, gentle, and cultured man. He has a Zen heart. Therefore I am prejudiced: I am probably predisposed to liking what he plays for me.

That said, I believe the art part is his audio virtue--it is his highly developed aesthetic judgement that allows him to choose the right equipment to import.

However, if I say something is wonderful--and it's really ca-ca--then my whole credibility begins to smell less than wonderful. Therefore, you have been warned...

For two months I only listened to CDs. I went crazy and put myself in debt. I doubled my CD collection since the 1st of January. During this time I entertained all sorts of irrational thoughts--like maybe I should sell my record collection and spend the money on CDs. Or maybe CD is better than LP after all. My LPs looked boring and dirty and old and useless. I started carrying the magic remote control everywhere. I started praying for a CD jukebox so I could even select the CDs from the remote. It started to feel like getting up and changing a CD was old fashioned and unnecessary. I became ready

for a future where I just have to clap twice and the CD player says, "Yes Master!"--and I say, "Kid Rock, track seven." I'm not joking: I am absolutely ready for that kind of convenience. Send the LPs and the master tapes to the junk store! I want to be able to wave my hand up and down to change the volume. I want to snap my fingers and hear music. Actually, how cool would it be if the music could just follow you like a dog? Wow! Imagine walking down the street and you meet a friend, and you say, "Have you heard the new Beck album?" And she says, "No--but I'd like to." So you snap your fingers and there it is. Right there in the air around you.

I am ready for that.

Sadly, that's in the future, but here's the good news and the bad news for today: The good news is the Flatfish plays music as well or better than I ever hoped for from digital. It plays the content of the music. It plays the heartbeat. If a hundred women scream--it plays their pain. If a singer breathes--you can feel his chest. It can make music appear beautiful and even sometimes revelatory. When the music is nasty--I feel the nasty coming out of the speakers. When it is nice, I smile.

While I had it here, the Flatfish felt to me like it reforged the chain of every rhythm that was pressed into the silver disc. It recovered the theater, the poetry, and the science of the music I played. In the space of my listening cabin, it appeared to remanufacture a big chunk of the reality and the spectacle of my favorite discs. It seemed to follow the music breath by breath and beat by beat. It played with authority and resolve. It did what I think is hardest for any audio component to do: It made every disc sound different and every type of music feel important. The Flatfish was unusual (to me) in the way it made the music feel immediate and present. There was an air of strength and rock-steadiness to the way it presented music. I felt like the player was my obedient slave...except, (and here comes the bad news) when I went to change discs.

The Flatfish is very cool looking. Very modernistic and original in design. Its main purpose in life seems to be CD transport, but the Flatfish also contains a bare-bones DAC (four-times oversampling, single-bit), so you can use it as a self-contained CD player. What it doesn't contain is a power supply: You need to buy 47 Laboratory's Model 4799 "Power Dumpty" for your Flatfish, making it a \$5400 CD player. The Progression DAC is 47 Lab's \$2700 upgrade/companion piece. This needs a Dumpty of its own, but you can power it with the one you already bought for your Flatfish. But whoever designed the Flatfish must have played the same disc over and over. This beautiful little player completely stops being beautiful when I go to change discs. It stands on three little spiked legs with cups on the bottom and points on the top, and when I try to undo the disc clamp to remove one disc and exchange it for another, it either wobbles around like a hula hoop--er or it tips over. I got used to this borderline shakiness and I became more "Zen" in my approach to handling the thing--but I still think the designer was so enamored with how it looked that he didn't care a lick about convenience. It works more like an LP turntable than any CD player I've used.

There's a second problem: The controls and display are on top, on the flat part of the fish. But the eye that reads the beam from the remote control is on the side. Therefore, the listener has two choices: He can stand over, next to and in front of the machine and manually select tracks with the switch on top (but then he may have to fix those spikes because he'll probably knock it over); or he can sit in his chair and massage the wand--in which case he cannot see the display to remind him which track is playing, or which track he has selected. None of this is really a big deal. It's just kind of funny, ha ha. The thing is still beautiful. I would be proud and happy to own it. I used the remote almost all of the time and I even reached a point where I could almost enjoy the gymnastics of disc changing. I just think you should be warned. If you are not inclined toward serenity--if you're always impatient, or if you're one of those nasty people that blow their horn when the traffic light changes--then you may find the Flatfish a bit clumsy and slow on the draw. I personally would not trade its lack of ergonomics for some ugly black box with a drawer that pops out like toast.

While I used the Flatfish, Yoshi Segoshi loaned me back another Gaincard amplifier so I could drive my Sendor 1/2s with a complete 47 Laboratory system for a time. This three-piece system (four with the Progression DAC) felt like all I could ever possibly need. It looked sophisticated, and it was down with and on top of every type of music I could throw at it. Bass had major punch. I never noticed anything to be lacking.

I did, however, discover something very interesting when Yoshi loaned me his Model 4705 Progression DAC, a non-oversampling device which is, as far as I know, as close as anyone comes to making a stripped-down, "purist" product for converting digital information to analog music. Until then, I had been using the Flatfish as a one-box CD player, and I was happy. When I inserted the Progression into the chain, everything changed. I was completely surprised. Instantly, there was a letting out of breath. My body became less tense. The music I played felt more relaxed and stretched out. More easygoing. The whole musical presentation became more like a flowing river.

I used this setup for about two weeks, and one day I got a hair in my ass to take the DAC out and remind myself what the Flatfish sounded like on its own. I was surprised again. Now, the music seemed kind of brittle and overly crisp. Less supple and elastic. More jerky and contrived. More mechanical. I could make out the words to songs and hear tiny details a little bit better, but I clearly preferred the system with the DAC in. Which setup is more real? You tell me. All I do know is, if I could afford the Flatfish, the Progression, and the Gaincard to drive the Spondor 1/2s (I love the 1/2s more and more each day), that would be the system I'd be happy with for at least five or ten years. Or at least until I can clap my hands and say, "Supercat, track six!"

Quality: 00000

Value: }}

Simply Musical

47 Laboratory Model 4713 Flatfish CD Transport/Player
Model 4705 Progression DAC
Model 4799 Power Dumpty

by Dayna B

SIMPLE CONCEPT

Ever since I began my quest for the best music replay I could obtain, keeping things simple was one of my criteria. Whenever I have stayed from that concept of simplicity in any audio system, the quality of music playback has suffered. The trick was in keeping my audio system simple without going so far as to compromise playback quality.

47 Laboratory is a company with similar goals. They believe in simplifying all technology as "only the simplest can accommodate the most complex." It is their belief that graphs and charts only measure sound, and have very little to do with the actual quality of the sound---that is, the music, which is after all the objective. Music can most definitely become complex, but the reproduction of music does not have to be complex. 47 Laboratory seems to set on pushing the limits of simplicity while achieving optimal sonic results.

They believe that one of the major hurdles to overcome in bringing music playback closer to reality is the ability to maintain the liveliness and the activity of the music. This means that the audio components must be able to track the rise and fall of the music signal with great precision. 47 Laboratory's philosophy is that the key to restoring the liveliness of the music is to minimize any storage of energy, be it mechanical or electrical.

To control electrical energy storage, they minimize the number of parts in the circuitry of all their products as much as possible. Then, they shorten the signal pass length to the absolute minimum. They utilize compact, rigid chassis construction in an effort to minimize mechanical energy storage. They believe that damping materials and suspension systems merely cause delays in the inevitable transfer of mechanical energy and simply smear the music signal. Therefore, 47 Laboratory eschews the use of such things. Instead, any additional mechanical energy control is done through utilization of specific construction materials and grounding techniques.

SYMPLY NOT YOUR AVERAGE DIGITAL AUDIO

The use of a DAC without ant filters and oversampling seems to be as simple as digital audio can get. You'd think that this is where digital audio should have started, or that someone would have tried it sooner. Yet, in every book I read about digital decoding, the 'rule' say that you need oversampling to beat down digital nasties. They say the same for filters. It's true that they say digital filters are better than analog filters, and from what I've heard, I can't argue with them there. This kind of response from the "experts" is especially true regarding 1-bit DACs. I don't know about charts, graphs and measurements, but I can argue with my ears.

It has always strained my imagination to use the term digital audio to refer to music. While there have been times that CDs sounded good, "good" has always been a relative term, with certain limitations or stipulations. After all, the music is chopped up into myliad pieces and then brought back together. The last thing you would expect from digital music playback is smoothness.

Yet smooth is the first word that came to mind when I listened to music played through the 47 Laboratory Flatfish CD transport/player and Progression DAC. This smoothness did not compromise the music in any way. On the contrary, it enhanced the enjoyment of the performance. This was quite evident when I listened to Lori Lieberman's Home of Whispers (Pope Music PM 1005-2). Her voice was without any trace of edge and sounded full and natural. The title track became not just lyrics against a back up band---it became a true glimpse of the secret emotions and events of one woman's life. "Roots and Wings", with the exquisite simplicity of Lori's voice against piano and cello, and then against the full glory of the choir, truly becomes, for the first time, a love song. The piano was reproduced with a continuity I have never heard with digital playback before. There was always an excellent sense of immediacy with the music in spite of the silkiness of it's treatment. There was still a wealth of detail and imaging was excellent. The mountain dulcimer sounded, for the first time, LIKE a mountain dulcimer. It was almost as if I were playing the dulcimer my father-in-law made for me; the system

gave me the proper metallic twang to the strings and a touch of speed that came much closer to real than I have heard before with this recording. The most impressive thing about listening to this CD was that the emotion and mood of the music were well presented.

This is the first CD playback system that I fully enjoyed without any caveats. The Flatfish transport and Progression DAC performed without compromise. They neither displayed the disjointed sound or edgeness so common in other solid-state design nor the glossy or bloomy sound of tubed systems. There was a full depth and sense of ambiance to performances like Jose Serebrier and the LPO performing Rimsky-Korsakov's Scheherazade (Reference Recordings RR-89 CD). The orchestra sounded natural with a huge sense of the recording venue. The strings sang out sweetly, the drums were dynamic and the horns had a very natural fullness to them. There was a great sense of speed whenever any type of percussive event took place. While the quickness and agility wasn't as good as it is with LPs, I never realized a CD could come this close to analog. Equipment with such speed and detail often has a clinical sound that causes the loss of the music's emotion and mood. This was not the case with the Flatfish/Progression combination; this setup was able to recapture the mood of the performance and portray the sheer drama of the music with aplomb.

Timing was one of the Flatfish and Progression system's best features. The speed, beat and rhythm held together exceptionally well. These babies could boogie better than any ordinary high-end CD system. Natalie Imbruglia's Left of the Middle (RCA 07863 67634-2) sounded excellent on this system and had a high dance-ability factor. The music came alive with a nice flow of emotion, and it had a certain smoothness with flair. It was fun, lively and invigorating, and Imbruglia's unique vocal style was reproduced well.

SIMPLY MARVELOUS

In case you haven't figure it out yet, I love the 47 Laboratory Flatfish CD player/transport and the Progression DAC. I've finally found a digital system that I truly enjoy without any qualifying factors. This system recaptures the liveliness, detail, sense of space, emotion and drama of recordings. The Flatfish and Progression harmonize to reproduce music so well that it satisfies one's emotional needs for music. If you live for music, the 47 Laboratory Flatfish and Progression are must have items. What else can I say.

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HALL OF FAME

by Milan Rupić

To make children with not such a great appetite eat something from time to time, parents are ready to resort to all sorts of tricks, from imbecile grinning, singing, or standing on their heads, to feeding a spoiled brat showing a lack of enthusiasm for swallowing chunks of food while it is sitting on the toilet bowl, accompanied by background music featuring periodic flushing of the toilet and similar foolery. However, this is all harmless and understandable in a way because, as crazy as all of it may seem, this is still our progeny, a helpless human being, incapable of understanding the necessity of opening the mouth and pushing the chunks of food to the stomach for the purpose of mere survival. But what to say about a man, a grown-up person, supposedly normal and sane, who uses similar gimmickry to make his/her audio system, i.e. its individual component function in line with its supposed potentials?

Naughty Child

The name of the naughty child for which its owner/user need not stand on the head or hang down from the lightning fixtures but has to take, in normal terms, completely abnormal actions is Phono Cube. This is a phono (MC) preamplifier, model 4712, coming from the freakish Japanese high-end manufacture 47 Laboratory, whose ID is already familiar to all the readers of this and some other foreign magazines, as well as the performance and sonic achievements of their Gaincard amp, recently tested and presented somewhere between the cover pages of the third issue of the magazine you are just reading. Phono Cube resembles in many ways the above-mentioned amplifier, which is bizarre enough in and of itself. The major similarity is, of course, the cylindrical power supply Power Humpty, which is the same for the both apparatus, whereas both Phono Cube and Gaincard can be powered by two Power Humpties, representing in this way a true double mono system.

The apparatus themselves could not melt in the crowd of other ones. They are made of the same material, display similar design, a double mono system... It is just that the integrated amplifier is flat (hence Gaincard), while the phono stage is cubical (hence Phono Cube) and shows a stunning resemblance, especially when viewed from the front or from the side, to a tenfold increased cartridge. And while the dimensions of the integrated amplifier were rather discouraging, arousing the darkest forethought, the visual aspect of Phono Cube would not inspire any prejudice at all. If any, especially for someone who has established first contact with it without having seen the amplifier before, they are likely to be of quite the opposite nature. Namely, when viewed as a system, Phono Cube and Power Humpty appear quite substantial for a phono stage, both in terms of mass and dimensions.

The Cause of the Problem

What kind of a device could provoke so many problems for which a grown-up person, longing for a feeling which can be achieved only by a quality phonosystem, would act as a moron? How is it designed, what is it composed of? According to the designers and the manufacturer, Phono Cube is a unique equalizing unit amplifying all voltage generated by the MC cartridge, without any losses. It has a double mono construction and design, and each channel is separated in its own case/housing. The rigid and pronouncedly compact case enables fast and effective release of vibrations that could otherwise adversely affect the sound balance. There are 25 components in each channel, and the path that the signal has to pass through the apparatus is only 44 mm long. But, what is it inside which enabled the designers, in their own words, to achieve what they wanted, and that is exactly the same sound as it is stored in the grooves of well recorded LP records, i.e. to accomplish a sound that would be exact but not at the same time sterile, or chemically neutral and tasteless like distilled water? In a sense, it is very much similar to the sound produced by a top-notch CD player but with all the elements in which a phono integration even today surpasses by far digital sound reproducers. Unlike the majority of the phono stages on the market, Phono Cube has been designed in such a way that its input impedance is zero, which enables all of the voltage generated by the cartridge to be forwarded directly to the amplification circuit of the phono unit.

The next issue to which 47 Laboratory paid a lot of attention was the negative feedback. Despite being well aware that its utilization results in a higher signal-to-noise ratio and a more linear frequency response, they did not make the most of this advantage because they were convinced that there is also a side-effect – the typical and easily recognizable emphasis of the high-frequency range. Their system, so they say, has maintained, thanks to the solutions they say nothing about, nor do they explain

them, a low noise level, along with entirely linear frequency response, deprived of any harshness and emphasis of the high frequencies.

Blasting Extravagance

The first thing I was curious about, and anxious at the same time, was the level of power with which Phono Cube would energize the line input of my preamplifier. And this for a very good reason. Namely, the Ortofon 7500 cartridge, which I intended to use for the test, has an extremely low output voltage (0.13 mV), which could only with a great difficulty drive most of the phono stages I have had the opportunity to use so far. Which means that, as compensation, I had to turn the volume up and increase the base noise level (especially with tube preamplifiers). The fact that I already had another cartridge of equal quality in store, which is capable of generating almost a threefold higher output than the Ortofon 7500 cartridge, speaks how certain I was that it would not work. However, lucky me, I was wrong. And to what extent!? The signal coming out from Phono Cube was so powerful that, for the first time ever since I have been using this MC cartridge, I had to turn the volume control more down in respect to its position at which I listen a CD of a usual (2 V) output voltage. This was so astonishing that I could not figure it out for a while. And while I was weighing the pros and cons trying to reach a logic conclusion, enjoying from the very first beat (the apparatus was already broken in when I received it), the sound one can only so rarely hear, a thundering blast came out of the loudspeakers! Never before has anything so loud and terrifying come out of my loudspeakers. I thought that something unquestionably came to an end in my system, with a thundering last good-bye. But, nothing of the sort! A genuinely realistic sound continued to come out of the record, filling my room with sound as if nothing has happened. As I was just about to forget the recent sound horror, believing (or convincing myself) that it actually never happened at all, that this must have been a single, temporary collapse, after 15-odd minutes an earsplitting warning that there was something weird and unusual going on came from the loudspeakers again, suggesting that if I kept closing my eyes/ears as a consequence of being flabbergasted by the acoustic scenery which was spreading in the space between and behind the speakers, i.e. if I continued to neglect the cause of the problem, the speakers could suffer final catastrophic outcome. The last big blast was the starting signal for action. But what to do? I identified the originator of the blasting sounds very quickly. It was an old refrigerator, sharing the same socket with the freezer that did not cause any disturbances when switching on and off. As it was also the case with the refrigerator. To be fair, certain phono units indeed produced occasionally some sort of single cracking sound when the refrigerator turned on. But the intensity of the cracking was negligible and more silent than any of usual "cracks" from a record. What was going on while Phono Cube was a part of the system surpassed both by loudness and power anything imaginable. What next, that was the question. It was obvious that voltage spikes were infiltrating the phono stage, which, due to the high gain of the latter, were extraordinary intense. Desperate rather than determined as I was in terms of what I was doing and how to accomplish it, I started to piddle around with ground loops. The cracking structure (now that the sound volume control was set almost at zero) did change indeed but the sheer intensity remained the same. Then I started to move Phono Cube around the room, placing it at various positions. The intensity decreased, but indistinctly, insignificantly. I placed it on a special stand made of textolite. Again, the improvement was small, but not of any practical valuable. And then I put RFI filter on the refrigerator power supply cable. Now, that was a significant advancement! And then another on the Phono Cube power supply cable. And then, finally, normal listening could proceed. Not that the cracking completely disappeared but there was no longer any trace of big blast. One could listen quite nicely, with very mild occasional cracking interruptions, very much akin to those heard in case of minor damage on the surface of the record, which did not threaten the integrity of the loudspeakers and which I gradually got used to and ceased to perceive it. And how could I when the sound was ...

... simply the best

Fantastic, unmatched, fascinating, impressive... In a word, absolutely superior! Regardless of whether jazz, rock, ethno or classical accords were pressed in the vinyl grooves, regardless of whether dealing with small or big, vocal or instrumental, silent or loud listening, with Phono Cube as preamplifier stage in my system everything sounded better than ever. And here one should conclude the review because words are not enough to describe the whole of the sound, least to express the subtlest details and emotions that unfolded widely and manifestly in front of me and filled my room through Phono Cube. One should say simply and without any hesitation that Phono Cube produced in my system the best sound I have ever heard at home and brought it closer to the rare ecstatic experiences I had while sitting in front of several best and excellently tuned systems in the world, i.e. the Phono Cube is unparalleled not only as the best phono stage I have ever used but also as the best individual piece of audio gear, regardless of the type, ever being a part of my system. And there were many of them... This

would be the end of the tes(x)t. However, to make perfectly clear what sort of audio gem we are dealing with, I will try to put in words as detailed as possible everything that was going on within the walls of my room.

Phono Cube is, undoubtedly, a phono preamplifier that brought me closest to the ideal of live music so far. It is one of the rare devices used as a paragon for all other and that sets new audio standards, pushing the limits of the possible beyond the imaginable up to the present date. Above all, Phono Cube contributed to making the sound coming from the turntable essentially neutral and transparent. Its absolute noiselessness and thus practically physical absence, enabled a piece of music to be as it really is: with all its strengths and weaknesses. The sound was neutral because all the veils obscuring the finest musical details were lifted, because nothing remained hidden and covered, because not a single trace of parasitic resonance and the related coloration, which is usually considered to be an inherent and unavoidable weakness of the phono preamplifiers, could be perceived, because there were no any admixtures that would add additional character to the sound. Transparent because nothing hindered clear and full insight into the integrity of the intricate musical fabric as well as into the configuration of the orchestral body interpreting it. Nothing less worth mentioning is the purity of the sound and absence of any, even the minor distortions. Everything seemed absolutely natural and exactly as it should be. It is therefore fascinating how one simply stops feeling the need for asking oneself "how?", "why?", "from where?", and starts taking what one hears for granted, laying on the same level something that is in its essence "unnatural" with the live sound experienced in a real surroundings and with actual people who play genuine instruments, simply and easily believing that live musicians are in front of him, and not a pile of electronic components molded into a more or less harmonious audio chain, dreaming only about how everything could sound even better if one would have the one, actually non-existing, ideal audio system that would exploit all the capabilities of Phono Cube to the fullest level.

The definition of all, including the most intricate, so often suppressed and veiled musical details, as well as the reproduction of the transients from the top to the bottom of the audio range were chilling. Because, when one can hear from the LP record, without any "technical" admixtures, fine and gentle strumming of a guitar so that the resound of every single string is absolutely clearly and distinctly perceived, its structure felt, the full vibration heard and every movement of fingers on the string experienced, then one starts looking around the room, trying to locate the "live" guitar player! The same applies to the solo piano, harpsichord, even to the applause on well done live recordings. The applause could be heard as a harmonic accumulation of individual hand clapping and not as a flat and amorphous noise resembling the one when steak is put on hot grill. The syntagm inter-transient silence, very often used while describing sound, which, in reality, is a very rare auditory experience, becomes "a common thing" with Phono Cube integrated in a well-tuned phono system. The intensity of stroke is easily detected, pause between individual attacks is noiseless, tones last "as needed", with a sharp cut-off and without any parasitic residual vibrations, and the triangle sounds firm, determined, bright and pronounced, without any noise during the stroke or while vibrating, but above all is well positioned.

It is difficult to extract individual traits from such a primordial harmony, as it would be isolating a living being from its natural surroundings. However, for the purpose of a digest and utterly simplified information, one should say that the high-frequency range sounded at the same time airy, clear, fast and soft, and absolutely convincingly. One should have heard the sweet sounds made by the flute or the oboe. Sweet like honey! And the vocals! Sopranos were explosively potent and sharp but at the same time naturally soft, humane and articulated, bass section was sonorous, powerful, solid and rich. The bass range sounded unmatched – accurately, faithfully and convincingly natural. If bass was "floating" on a record, Phono Cube reproduced it as such, when it was firm, solid and deep, it came just like that out of the loudspeakers. I was revolving all sort of music on my turntable, from perversely recorded synthetic rubbish to state-of-the-art performances of greatest orchestras (such as, for instance, the closing chords of Mahler's "Eight Symphony" for over 400 performers), from large choir corps to small black vocal bands, from the darkest heavy metal, which was at hand, to the subtlest Schubert's lieder, it was always the same. As recorded, so reproduced by the loudspeakers! Of course, I could write as many pages as I already have, containing information and impressions of the reproduction capabilities of 47 Laboratory's Phono Cube, but I am afraid that this could well be too close to exceeding the limit of good taste, even overstepping it and turn into uncurbed idolatry. Therefore, to conclude, I will simply add that Phono Cube reproduced with exquisite reality the finest shades of numerous dynamic gradations of a big symphonic orchestra; it depicts accurately even the smallest nuances as well as big drifts in dynamics, it fascinatingly faithfully and impressively renders all dimensions of the sound stage, and this is why any verbal description of these features is neither possible to the full extent nor could it fully convey what I had the opportunity to hear. Not just I but a number of my loyal audiophile friends (with whom I do not always share the opinion) either, who hurried to witness such a uniqueaural de-

light but also to be present, as always, to prevent hallucinating hysteria which (much too) often lurks as a latent danger when an audiophile happens to be near such a ("perfect") thing like Phono Cube.

Everyone who has listened to any state-of-the-art phono system and who believes that he/she could imagine, based on the experience and my textual description, what (approximately) a phono system with integrated Phono Cube sounds like is, unfortunately, wrong. Phono Cube is something special and unique. A class of its own. This is a global product of a small firm of enthusiasts which embodies perfectly all today's knowledge about cartridges and MC preamplifiers, all efforts and achievements in this area, made, collected and developed over more than half a century, all for which generations of audiophiles and manufacturers have been yearning. But there is also something unique to it, something above and beyond all, which will, despite the fact that it will probably never experience planetary fame, not because of its high price (\$4,000), in this age when gramophone is becoming an increasingly exclusive product day by day, secure it a place place in the Hall of Fame.

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