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## A Flagship turntable system from Bluenote

[\[Italian version\]](#)

Products: Bellagio turntable, Bellaria and Baldinotti cartridge

Manufacturer: [Bluenote](#) - Italy

Cost, approx: Bellagio turntable euro 4.995,00 - Bellaria tonearm euro 1.795,00 - Baldinotti cartridge euro 1.595,00

Reviewer: [Geoff Husband](#) - TNT France

Reviewed: May, 2003

### Authors Note

In order to understand this review it is essential that you visit the [methodology](#) page that outlines how the test was done.

### Introduction

One striking result of my current investigations into turntables is the sheer number of manufacturers of high end turntables out there. 20 Years ago, in Britain at least, you had Linn, Pink Triangle, Michell and Rega, and that was about it. That I should find one-man-bands beavering away is to be

expected, but by looking world wide I found myself coming across manufacturers of some standing and with both large portfolios and considerable world-wide sales. The subject of this months review is such a company. Bluenote sell over 500 turntables a year, and have a range that goes from Rega levels up to serious high-end kit.

But Bluenote were a find for one other very important reason. Not only do they make turntables, but arms and cartridges too. There are two ways of looking at this - that possibly here is a company weakened by not specialising, or a company that can optimise its turntable by producing a complete matched front end. When I tell you that this product list extends to phono stages, amps and speakers then you'll see that this is the only high-end company outside Audionote UK, Linn and Roksan that can provide a groove to room chain - impressive\* .Interesting too that all the others are British...

I suppose you'll not be surprised that I told them to push the boat out and send their very best, and so sitting on my Clearlight turntable shelf is their Bellagio turntable, Bellaria tonearm and Baldinotti cartridge.

### Design and construction

#### First the Turntable

There are very few turntables that when set up next to my Orbe make it look ordinary. The Bellagio did. In the box is a note which describes the deck as being hand finished and so any variations, imperfections are a result of this. Who are they kidding, the thing is gorgeous! I don't know quite how they treat the black acrylic they supply, but it has a piano black finish that makes the alternatives look like cheap plastic. It also seems to be harder and less prone to scratches than the usual. This black acrylic is used to form the two plates of the chassis, separated by gold plated brass rods. The upper one sits on the springs and holds the massive aluminium main bearing housing. The lower plate merely hangs below, obviously adding to the striking visuals, but its contribution as a sink for vibrations must be



considerable.

The bronze bearing is conventionally orientated and both long and massive, with the carbon steel spindle riding on a teflon derivative (Fezene) bearing.

The platter is unusual. It's made of a black composite called Sustarin®, and is split into two halves like the [Loth-x Aida](#), the upper half bolted to the lower and the two separated by a lossy polymer of PTFE. There is a weighted alloy puck rather than a screw on clamp.

It has a superficial resemblance to a Gyrodec platter in that there are gold plated brass weights spinning underneath, however in this case each weight is bolted directly to the platter. As with the Gyro putting these weights at the edge of the platter increases inertia and thus speed stability.

The motor unit is an AC synchronous type using 24 rather than the more common 12 poles, to give a smooth transfer of power. This drives the platter by a rubber belt which shows less "bounce" than the Orbe belt. The motor sits on the base board rather than the turntable support and, uniquely at this price point, has no power supply other than a simple cap/resistor inside the motor housing. This is an interesting (brave?) decision in a market where the public were sold the idea of electronic power supplies 20 years ago.

The motor pulley is a very complex piece of kit (see pic) designed to isolate the motor, and speed change is by moving the belt from one pulley groove to another after removing the (tight fitting) spindle cover. The suspension is interesting. The beautifully turned alloy feet take threaded rods up through the base and then up to the springs. There are simple one-piece spring supports (unlike the Orbe) which hold the conical springs - which appear coated with some polymer and certainly don't ring. The upper chassis plate just sits directly on these springs, no adjustment other than height being available. But then you bounce the table and what happens isn't what you expect. The springs are very stiff and so the turntable 'vibrates' much faster than the slow bounce of most tables which generally have suspensions tuned under 10 Hz.



This stiff suspension, especially for quite a high mass table makes it very stable and easy to cue, but as with anything that goes against the majority I needed to know why. Bluenote said that the turntable primarily acted as a solid plinth design with the suspension offering less isolation than normal - now there are bloody battles between the solid vs. suspended brigade so perhaps Bluenote are on to something by splitting the two? The one undeniable advantage is it makes it a doddle to set up and easy to use.

Lastly for the couple of people who've implied that the Bluenote is a Michell copy, all I can do is point you to the above description which shows that the Bluenote is fundamentally different in almost every respect, the only similarity being the use of acrylic, a Michell trademark, but hardly unique, and Michell was certainly not the first to do it.

## The Arm

The Bellaria is a unipivot. Recently a tonearm manufacturer I talked to dismissed such designs by saying anyone could make them and it was much more difficult to engineer a gimballed arm. It's easy to take such comments as fact, after all you can make a unipivot at home very easily. However making a good unipivot is a different kettle of fish. With a gimballed arm you put an armtube onto a bearing housing with the bearings at stylus height and hang a counterweight on. OK I'm exaggerating a bit, but the recipe for a good gimballed arm is pretty simple and well understood. Look closely at most gimballed arms and essentially (if they are any good) they are much the same in basic plan. Unipivots by contrast are a black-art with deeply entrenched camps arguing for low counterweights, high counterweights, pivot orientation/material/height, damping or not etc etc. With so many variables getting something that actually works is a nightmare. Perhaps it is significant that Bluenotemake make both gimballed and unipivot arms.



) The low centre of gravity is achieved by a low slung counterweight and a sharply tapered bearing housing that carries most of its weight low down. The stiff armtube is titanium, large diameter - think of a Hadcock then think of the opposite and you are there...

The point of the bearing is above the stylus level for stability, but it's cup can be screwed in and out from the top of the bearing housing making micrometric adjustments to VTA very simple. However as well as altering VTA this does alter the geometry of the arm so there is another unknown variable here.

The most unusual aspect of the design is that armtube. It's titanium. Titanium is a "cool" material - hey! they use it in F15's, top-end mountainbikes, the Shuttle... And it's expensive!

All this combines to make it a very attractive material for a high-end manufacturer to use. But in the end is it worth it? I suppose I should give a few words on the wonder material... It's self-finishing. That means it doesn't corrode like aluminium or steel, and any polish will remain like new - rather like gold. It's physical attributes, compared to aluminium alloy and steel, splits the two. It's lighter than steel, heavier than aluminium. Stronger and stiffer than aluminium, weaker and less stiff than steel. In fact top aerospace steel, aluminium and titanium produce much the same strength and stiffness for a given weight. Titanium's big advantage over aluminium is its fatigue resistance, aluminium fails if you bend it back and forth - one reason why you don't find aluminium springs but do find them in steel and titanium.

Trouble is all this hardly justifies its inclusion as a material for armtubes! So apart from the 'cool' factor why do Bluenote use it?

Some possibilities... The best armtube should be very light and very stiff. All three of our materials can do this, but because of its strength titanium can be machined very thin, an aluminium tube might collapse in the lathe when being worked to an equivalent thickness (for a given strength/stiffness). A aerospace steel one might succeed but it's extreme hardness would make it a nightmare to machine and to get the same weight the tube would be wafer thin and again prone to collapse- though a narrower diameter, thicker walled steel tube would do the job (as with Hadcock). But here we are getting into pipe resonances. The point is that the three different materials, if machined to give the same stiffness/strength, will be very different, in thickness, diameter and therefore in sonic characteristics. I might add that carbon fibre is in a different league to all metals in regard to stiffness, but then it'll sound different again.

But Bluenote chose to use titanium over aluminium in their top arm and so they must believe that the titanium armtube, in their arm, gives the best sound. In fact talking to them they said they had a lot of trouble with 'ringing' in that thin walled tube and so resorted to extensive working of the tube to produce varying tube diameters to break up the ringing mode. This is a difficult operation as titanium becomes

work-hardened and so the more you do to it the harder it is to work. Bluenote could have just slapped on a plain titanium tube and used its kudos to sell arms. The cost of the material is insignificant, but the difficulty in using it and the complex form showed that Bluenote at least consider the effort worthwhile.

A finely worked aluminium headshell is glued onto this tube. At the other end a three part counterweight screws onto a conventional threaded stub, azimuth being adjusted by setting a rod shaped weight at the desired angle on the counterweight - then the whole thing is locked up by two small grub screws.

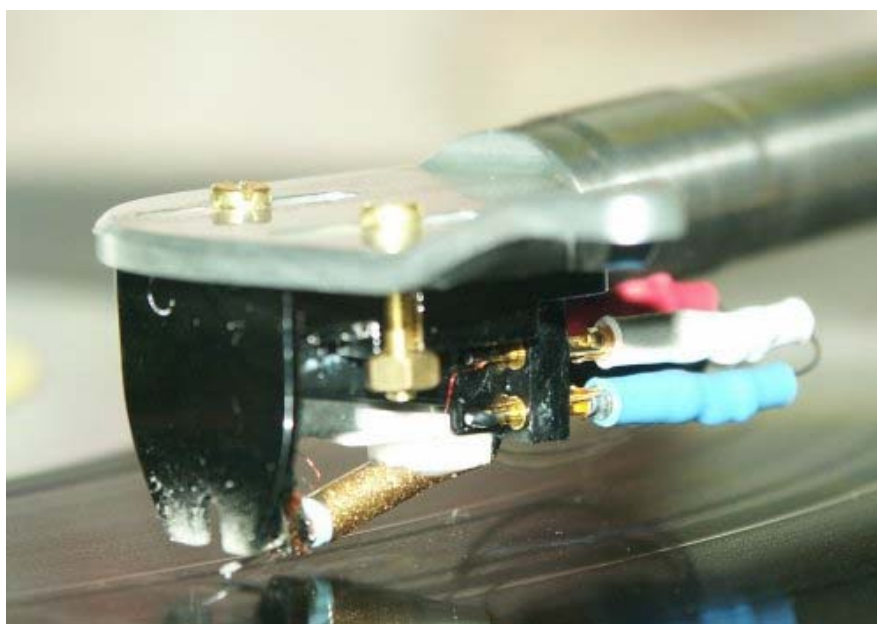
Bluenote don't believe in anti-skate. There is a vestigial thread and weight for low mass cartridges with high compliance, but otherwise the Bluenote runs without such devices. Once again we're into seriously controversial stuff, several manufacturers swear all anti-skate devices are poison to sound, others the complete opposite. I don't have the time or space to go into it here.

Fit and finish is superb though you have to like gold-plate. The only slightly 'agricultural' aspect being the threaded counterweight stub, but hell I can't see how they could make it look better without using a totally different system.

### **And lastly the pointed end**

The Baldinotti cartridge is the scariest cartridge I've ever fitted. Right up there with the Dynavector DRT-1 and then some. Like the DRT-1 it's an open design with bare wires down the side, no stylus guard and worse of all no threaded body, or even holes! This baby just has two slots down its side like a \$10 Shure from the '70's. I have very steady hands but I have to admit that this gave me the shakes...

That aside it's a pretty beast, a polished, aluminium alloy open body that looked chromed. It's a low output Moving Coil (MC) with a two piece stylus to reduce resonances. Here we have an expensive hand-built Italian exotic, not a Japanese buy-in with a Bluenote badge. At 12 grms its quite heavy and tracking at 2.4 grms makes me think it a lower compliance device than currently fashionable - this perhaps perfect for the low centre-of-gravity design of the arm?



### **Technical measurements**

The motor was to all intents and purposes - silent. Speed stability was very good, with just a fraction less drift (to my ears with a 3 kHz tone) than the Orbe. The turntable also ran a tiny bit faster than the Orbe, but as this will vary day to day depending on the accuracy of the AC this might change tomorrow. Start up was fast.

The arm cartridge interaction showed good design in that lateral resonance was centred on an ideal 10 Hz (avoiding warp frequencies and audible signals) though vertical resonance was heavily damped, mainly because of the low centre of gravity design? The lack of anti-skate showed itself as a strong buzz on the outer groove wall due to mistracking, this using the 3rd test level of the HFNRR test record (16 db) a level beyond most records. There is again some controversy on the relevance of such tests, and I should add that tracking on records was fine.

### **The Snag and Stage One...**

Regular readers of this series of tests will know that I've gone to great deal of trouble to put together identical sets of phono stages and cartridges to give a true back-to-back comparison with the reference Orbe/SME4. Usually I do these back to back tests as "Stage One" of the test. In this case, because I

was presented with a complete system, I started with that meaning to do the direct comparison tests as the last stage of the review. So after a happy month of listening and comparing the two set-ups of Orbe/SME4/DRT-1s and Bluenote I trotted downstairs to the listening room to do the swaps and found the Bluenote making the most god awful buzzing sound from the motor (I always keep review tt's running so they reach a stable state and also run in quicker). I had a strong suspicion on what was wrong and a flick of the platter showed the deck was as happy (unhappy?) running backwards as forwards - so a cap had failed or one of the motor leads fallen off/had a dry joint. Hells teeth! The simplest power supply you could imagine and it had developed a fault! Before you go off thinking "I'm not buying one of them then" I'll just say that this is just one of those things that happens on rare occasions, my old Gyro when delivered had exactly the same fault (which is why I spotted the cause so easily) and I personally would absolve Bluenote of blame - it's just bad luck.

But what should have been a five minute fix wasn't possible because the motor unit's base is glued on and though Bluenote said it could be removed with the application of a little heat I decided against it. Then time constraints just caught up with me and so I decided to scrap that part of the test. For what it's worth I suspect the Bellaria would have been a poor match for the Music Maker cartridge which likes a lower mass arm with less inertia, I'm sure it would have done OK but...

## So On to Stage Two

Boy the Bluenote came at a bad time... Dynavector kindly agreed to retip the long-term-loan DRT-1 which with all the turntable tests had started to cough up blood. The returned cartridge turned out not to be the DRT-1 but the new DRT-1s, the new flagship and even more of a beast than the DRT-1. With this bolted to the Orbe/SME I ended with a reference front end 15% more expensive than the Bluenote combination, not a huge difference at this level but perhaps significant...

For this stage I ran the two turntables through the Lehmann Black Cube SE twin so true back-to-back comparison of the two systems was possible with a flick of a switch. Using this fine sounding device both cartridges could be loaded to the optimum setting, a new addition to the test series and an invaluable one (thanks to Norbert Lehmann here).

The first thing was that the Bluenote was better shielded against hum than the SME, it's a minor point in my room where cable runs can be optimised, but for some people it may be significant - but now to drop the needle into the groove.

The first five minutes with any component sometimes gives an immediate impression that dominates a review no matter how long I listen subsequently, the Roksan Xerxes being a case in point. With the Bluenote no such revelatory experience was forthcoming because from the off it provided an even-handed and well balanced performance so that it slotted in nicely with the system without grabbing me by the throat. That said I quickly came to the conclusion that here we have a 'super Gyro' sound.

Let me explain. My previous turntable was a MK III Gyro (AC power supply). It had replaced an old LP12 with the result that heard a lighter more open and detailed performance, bubbly, fresh and alive. The downside was a certain lack of weight and authority and of course I missed the LP12's timing - but I was happy.

When I swapped to my Orbe I was expecting a 'Super Gyro', what I got was an altogether different beast, much darker and more powerful, with far better focus - it made the Gyro sound artificial and blurred. But the downside was sometimes a heaviness to proceedings, a slight loss of the 'air' that the Gyro produced.

With the Bluenote I found the presentation I had expected from the Orbe. Compared to my memory of the Gyro the whole thing much tighter and controlled, but retaining the air and clarity. The bass performance wasn't as pronounced as the Orbe but certainly didn't lack depth, going as deep as any disc allows (playing with a REL Stentor sub confirmed this). The upper bass was drier and a little tighter and the whole frequency range notably well balanced, and I guess balanced is the relevant phrase here. All records did well, the deck showing no great favouritism towards rock or soul or jazz or classical.

So to my notes on direct comparison that illustrate some of what I heard.

First Madonna's 'Love Song' from the 'Like a Prayer' LP, a duet with Prince (and very 'Princey'). Here

the Orbe made the kick drum more apparent, more hollow sounding and heavy, the Bluenote made it lighter and faster, the crack! of the impact jumping out at you, the decay showing less overhang. The soundstage was slightly more open.

Then on to my old stager Simply Red's 'Sad ol Red'. Both played this with considerable aplomb and ability, but the DRT-1s did give the real impression of the bass string flapping back and forth compared with the more pure tone of the Bluenote. No notes sang out out of place with either turntable - a fine performance all round.

Moving on to Jimmy Somerville's (Communards - "Age of Consent") incredible counter-tenor voice on "Why", the Bluenote put more air around the voice than the Orbe managed. Moving on to "Ain't Necessarily So" showed more bass weight from the Orbe combination, the more open presentation from the Bluenote giving the choir a wider spread and making it better delineated. The sax solo seemed to have more soul with the Orbe, more Selmer than Yamaha... On "Losing Control" there are various high toned percussive sound effects spread behind the singer - the Bluenote put a bigger acoustic around them but did smear them a little compared to the solidity of the Orbe. On "No more War" the Bluenote once again gave the backing vocals a more distinct presence and pushed the tambourine further back in the soundstage.

If you wondered why I've suddenly concentrated on one album it's because it's so good (on both turntables) that I just couldn't take it off!

Moving on to "Mars" from the Planets suite the Orbe majored on the menace of the piece, the massive weight of those mass strings driving on inexorably. The Bluenote followed, never matching this presence but giving the orchestra a wider spread - isolating individual instruments with more ease - as with so many things, which you prefer will depend on your system and taste.

Putting on those dreaded Organ pipes from the Ortofon test records gave the Orbe chance to rattle the windows. Here the Bluenote wasn't far behind, but it managed to isolate the pipes in space, spreading back into the soundstage - this is a very tough test.

A picture emerges. Next to the Orbe we have a more open and expansive turntable, one that gives space to instruments and drags detail out without pushing it at you. The Orbe has more of the soul and organic quality of music - as a head-to-head they were both excellent but different though the fact that both slotted easily into my system shows that the differences are ones of degree rather than fundamental

### **Stage Three**

For this, once again the Bluenote was used as the complete tt, arm, cartridge system only this time the phono stages were my own Audion Silver Knight pre and [Slee Gramamp Gold](#), both of which used the Slee Elevator step-up, a combination the Bluenote cartridge seemed more than happy with.

I had a full month to play and I have to say the turntable gave great pleasure. As so often happens the records I found myself playing tended to be the one's that showed the Bluenote in it's best light, but unlike some other turntables these discs covered the full spectrum of my (extensive) record collection. It proved even handed whether seducing me with Callas, shocking me with Polly Styrene or getting me up and singing with Arethra Franklin. It liked lead guitar as much as the drumkit, the sax as much as the double bass. It never let go or disappointed in any area just got on with making music - it was a pleasure to live with.

### **Niggles**

Not many. The motor housing has the on/off switch on it and it's a fiddle to get to, so I left the platter turning. The use of a puck rather than a clamp made changing records whilst the record turned easy (as opposed to the Aida which was hopeless). The Power lead fouled the bottom of the sub-chassis unless this was set quite high - the stiff suspension stopped this bottoming once set, but a slight change in the cable position would make life easier. Lastly the lack of a power supply meant speed change was possible only by removing the pully cover and swapping the belt over - a pain if you play 45's (I don't).

### **And so to the marks...**

| Category              | Mark | Comments   |
|-----------------------|------|--|
| Beauty tt/arm         | +2/0 | Gorgeous turntable, arm beautiful but different  |
| Fit and Finish tt/arm | 1/-1 | Finish even better than the Orbe, the arm close to the SME (ultimate) standard                                       |
| Engineering tt/arm    | 0/-1 | No power supply - a disadvantage?  |
| Compatibility tt/arm  | +1/2 | The turntable will take most arms, even heavy ones. The arm if fine with MC's but effective mass too much for the MM |
| Speed Stability       | +1   | excellent despite the simple supply...   |
| Timing                | 0    |  |
| Dynamics              | -1   | very good but the Orbe's bass weight pulls it ahead fractionally.  |
| Stage Width           | +1   | broad, slightly more diffuse   |
| Stage Depth           | +2   |  |
| Bass Depth            | -2   | good   |
| Bass control/speed    | +1   | The Orbe is more solid the Bluenote faster   |
| Detail retrieval      | +2   |  |
| Midrange clarity      | +2   |  |
| Treble extension      | +1   |  |
| Treble Quality        | 0    |  |
| Overall colouration   | +2   | Just that bit more open and natural than the Orbe  |
| Realism               | +2   | Lack of character here helps   |
| 'Miss you' factor     | +2   | A really beautiful, well made and fine sounding combination  |

## Conclusion

One very pleasant result of this series of turntable tests is that with one exception all have shown a level of ability I'd be more than happy to live with. They've also showed a variety of presentations so that here there should be something for everyone. I've always said that my aim is not to find the 'best' turntable, such a thing is impossible given the variety of systems they are likely to be used with, not to mention personal taste and the music being played. All that said I'm inevitably going to end up with personal high points in the series and the Clearlight Recovery still remains the one that would be on my own turntable shelf if I had the money - it really is a 'Super Orbe'. But with the Bluenote I've been spoilt once again and the fact that the whole chain was made by them makes the achievement doubly impressive. That the thing looks a million dollars is the icing on the cake.

\*I await corrections...

## Thanks

After reading this test I hope it is evident that without the following companies this series of reviews would have been impossible - thanks from me to them :-)

Michell engineering - <http://www.Michell-Engineering.co.uk>

'The Cartridge Man' - <http://www.thecartridgeman.com>

Graham Slee - <http://www.gspaudio.co.uk/>

Clearlight - <http://www.clearlight-audio.de>

AudioNote UK - <http://www.audionote.co.uk>

Dynavector Japan - <http://www.dynavector.co.jp>

Lehmann Germany - <http://www.lehmannaudio.de>

#### Systems used

- Vinyl: [Michell Orbe SME IV](#)/Dynavector [XV-1](#), [XX-2](#), [Music Maker](#) (x2)
- Phono stages: [GramAmp2](#) (x2), [Lehmann Black Cube Twin](#).
- Preamp: [Audion Premier2](#)
- Power amp: [Audion ETPP EL34 Monoblocks](#). Loth-x ANT 300b SE Integrated.
- Cables: FFRC and Sonic Link speaker cables. DIY silver interconnects. Audionote silver interconnects.
- Speakers: [IPLS3mtl's](#), Loth-x [Polaris](#).

#### Test records used... - [Killers](#)

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