



EQUIS ACCREDITED  
The best of fine hotels

# The Audio Physic Luna II Sub-woofer

by Richard S. Foster

I first became aware of Audio Physic's outstanding Minos sub-woofer back in the fall of 2002. On a visit to California I heard a system driving a pair of Audio Physic Virgos whose lower octaves were sounding simply amazing. I spent some time scouting the room before realizing that the great bass I was hearing was coming from the Minos sub. The coherence and integration were simply astonishing, setting off deep internal pangs of loss and regret for the bass my JMLabs speakers couldn't deliver. Unfortunately, in my reduced circumstances (fiscal as well as dimensional) the Minos was simply out of the question, on grounds of size and price.

When it comes to low-frequencies my audio history has always been blessed (or cursed, depending on your point of view). I've yet to hear a single pair of speaker cabinets that can handle full-range signals the way I would like: Either the demands of the low-frequencies compromise the mid and treble or vice versa. Just take a look at some of the speaker systems that I've owned and enjoyed over the years. Both the Infinity RS1/RS1b system and the Acarian Phalanx/Poseidon system, while tackling the issue of bass information in different ways, delivered the goods by employing (large) multiple cabinets. When I moved into smaller surroundings, I sold my Phalanx/Poseidon combo (and the four amplifiers needed to drive the beast) and fell in love with my JMLab Micros. The sweetest affairs can arise from necessity and now I've moved up to the Micro Bes, but while they're outstandingly good for their size, it's

obviously impossible for them to quench my thirst for that which is missing: anything under 50Hz.

However, I wouldn't consider myself a 'bass freak'. I really believe, truly (and deeply – pun intended) that if you get the lower octaves right then the rest of your system will blossom. Too much deep bass and you close your system down – a smaller, more congested sound stage, loss of definition and space, muddy sound and slowed rhythms and dynamics. Too little bass and the system lacks the scale and authority to recreate a plausibly 'live' sound from your front-ends. It's all a case of balance – something of a theme when it comes to sub-woofers.

The Luna II is, as you'll by now have guessed, a smaller and more affordable incarnation of the Minos. I've been enjoying mine for a while, and it's no exaggeration to say that it's dramatically changed my listening experiences.

The cabinet is approximately 25" tall but only 10" wide and 18" deep, resulting in a much smaller footprint than many subs. It contains two drivers, an ultra long throw 10" unit with an extremely stiff aluminum cone, coupled with a 12" passive radiator, positioned back to back across the narrow dimension of the cabinet. The rear panel consists of speaker terminals, RCA inputs and outputs, an on/off switch and four knobs to control crossover point, phase and volume. An additional Room Gain control provides active shaping of the low-frequencies, but Audio Physic are reticent when it comes to precise details. "Simply rotate it for the most even response", came the err, response.

There's also a standby/on light. I leave the Luna II on all the time. When there is no signal being processed, the amplifier goes into standby mode and as long as I'm not travelling, I see no reason to shut it down. With the exception of the phase control, each of the three knobs has 75 discrete positions. This simply means you can 'feel' the knob as you move from 45Hz to 46Hz and so on. That stepped control is a major benefit when setting up the subwoofer, making swift, repeatable adjustments simplicity itself.

This active subwoofer is extremely flexible. Like most such designs, you can either connect it with speaker cables to your amps or operate it at line-level directly from your pre-amplifier. I chose the latter as I am already shotgunning speaker cable into the Micro Bes and I didn't want to hook up more speaker cables to the Manleys. I also wanted to avoid any impedance issues and since I had the option to go line level, this seemed the natural way for me to go. Enquiries with other sub users confirmed the view, although there are also those who disagree, feeling that the "sound" of the amp overlaid on the sub aids integration. Me? I want speed and transparency thanks, to match those W-cone bass-mids in the Micros. Placement was to the left rear of the Micros, about a foot from the rear and side-wall, where the Luna II has remained, virtually undisturbed, for nearly a year. Whilst the sub has the capabilities and controls to function with your home theatre system, I've not used those functions as this is a straight audio only application.

Now, I know that for the first few months I was over compensating ►

▶ with too much bass for my system. A couple of friends would tell me and I would of course dismiss them, but deep down, I knew they were right. Until one day, the party was over and it was time to do a proper set-up and banish the dark and heavy-handed tendencies. I wanted the bass, but I didn't want to know where it was coming from. I wanted that foundation when the music called for it, but when there was no deep bass in the source material, I didn't want to know the sub was there.

The first stage in setting up any sub is choosing your recordings. I relied on several recordings I know intimately: the first movement of Argo's wonderful Poulenc *Organ Concerto* ZRG 878; *Psalms of Consolation and Hope* Argo ZRG 892; *The Birds* on the Speakers Corner/Mercury re-issue SR90153 and Cisco's re-issue of the Joan Baez album, *Farewell Angelina* VSD 79200. These would be more than enough to tell me everything I needed to know. Having said that, there is one record I know exceptionally well and it throws a huge soundstage while offering an extremely low noise floor. It has stunning sound and the opening movement with strings and bassoon will tell you instantly if you've hit the proverbial bull's-eye. It's the first minute of the *Adagio, Allegro non troppo* of Tchaikovsky's *Pathétique (Symphony No. 6)* with Pierre Monteux and the Boston Symphony Orchestra on U.S. RCA LSC 1901. No re-issue has ever come close to this original. It's the most magical opening of this great symphony I've ever heard and it happens to be an absolute killer to determine how good your soundstage really is. I've used this for years as it tells you, almost instantly, about the qualities you want as well as all the ones you don't. This I saved for last after I thought everything was set up properly.

The very first thing I did was to shut the Luna II off and listen to the system.

You need a starting point and obviously the best way to start is with the sub out of the system. Familiarizing myself with the chosen cuts from the selected LPs, I introduced the sub into the system. My previous experience wasn't totally wasted as I'd already settled the issues of Room Gain and Phase. With these left at the preferred settings, I started to play with the cross-over frequency and level.



With a setting of 50Hz and 15 on the volume control the dark-side instantly reared its head. Thus began the endless juggling of cross-over point against volume level. I eventually settled on 47Hz and an extra seven notches of level, but up or down one step on either control destroyed the balance and integration. It sounds simple but I'm talking several hours of intense listening here.

Then of course it was time to check the Room Gain setting (again in balance with the other controls, but mainly Level). Then of course you have to repeat the whole process for the

opposite corner of the room – the original position proving better. I also tried the Luna II between the speakers, but hampered by the lack of room reinforcement from corner siting, it was most unconvincing. Eventually I was forced to accept that the original was indeed the best.

The Luna II comes with spikes which I used for my initial listening. I've since replaced them with a Stillpoints component stand, itself resting on four Stillpoints and Risers. As a result of the increased distance from the floor, I've had to increase the level by another two notches.

Now, all this detail isn't intended to act as a "roadmap for peace" – or even sonic satisfaction; your own system would differ significantly.

What I want to show is just how much care and just how precise the set up needs to be if you are going to hear the Luna at its considerable best. Listening with the Luna II has given me tremendous pleasure.

I mean a real thrill.

On recordings I've known for years, especially their lower octaves, it has brought new meaning to the word nuance.

Great classical recordings familiar from my 'Three-Mile

Island' rig (the nick-name for the Acarian system) have been reborn. Another example: the Cowboy Junkies, *The Trinity Sessions* (Canadian Latent – Latex 5) and the first cut, 'Mining for Gold'. The engineer placed the DAT recorder next to an air-conditioning duct. No problem if your system doesn't go below 40Hz; however, when I played this on 'Three-Mile Island' the walls would literally chatter with overloaded bass information. That system had a crossover that let me cut the Poseidons out of the chain, leaving the Phalanx's to work from about 45Hz upward, which killed the problem dead. Well, with the Luna II it's back, but thankfully the ▶

▶ smaller room driven by one (rather than four) 10" driver is a lot more manageable. Bottom line: pre-Luna, this noise wasn't being reproduced. Now it is. And that goes for low-frequency notes too...

And the icing on the cake? The Tchaikovsky sounds glorious, with a capital "G"! The opening is truly magnificent. The stage is wall to wall. The strings are wide and deep. There is no doubt about the clarity and definition of each section of violins, violas, cellos and double basses. The bassoon really shines through and sounds incredibly natural. The scale, substance and authority I'm after are all there, while the speed of the sub enables seamless integration with the exceptional detail and insight of the Micro Bes. And in another example of perfect balance, the extra low-frequency weight brings even better presence, clarity and focus to the already exceptional beryllium tweeter.

What I find most wonderful about the Luna II is that whilst it's physically separate, the sound it delivers, when required, seems to come from the sound space created by the Micros. The illusion of deep bass coming from those tiny cabinets was exactly what I was hoping this product would deliver and deliver it does. That bass is very clean, deep, defined and offers superb tonal variety and shading, matching the subtlety and finesse of the mini-monitor mid-band. The Luna is clearly very fast for a sub-woofer and this is the key to the


superb integration. Having heard so many subs I thought it was going to be impossible to match one to my sonic, space and system demands. Audio Physic have proved me wrong, by engineering a unit that combines phenomenal speed and great control with just enough extension to get the job done. Combine that with the LF



contour provided by the Room Gain setting and you end up with a significantly more versatile and controllable result. I also love the idea that this unit uses a 'side throw' arrangement. The last thing I wanted was to look at a sub-woofer grill facing me, with the psychological feeling of knowing exactly where the sound was coming from at all times. The Luna is as visually unobtrusive as it is musically so.

A key part of any review is identifying potential shortcomings in

a product. While writing this piece I was really thinking about negatives or any issues I should note, but while no product is perfect, this one is perfect for me. It has been doing its job and I don't even notice it is there. What more could you ask of any component? If you despair of ever finding a sub with the performance and speed to integrate properly with your mini-monitors (or electrostatics)

try the Luna II – it certainly does it for me. 

#### TECHNICAL SPECIFICATIONS

Type:	Active sub-woofer
Bass Loading:	ABR
Driver Complement:	1x 10" aluminium cone driver 1x 12" ABR
Bandwidth:	18Hz - 120Hz(-3dB)
Crossover (variable):	45 Hz - 120Hz
Phase (variable):	0° - 180°
Amplifier Power:	180 Watts
Dimensions (WxHxD):	260 x 630 x 460mm
Weight:	34 kg
Finishes:	Light maple, dark maple, black ash, cherry and rosenut (special order only - £100 extra)
Price:	£1799

#### UK Distributor:

Aanvil Audio  
Tel. (44)(0)1359 240687  
E-mail. bill@aanvilaudio.com

#### Manufacturer:

Audio Physic GmbH  
Net: www.audiophysic.de