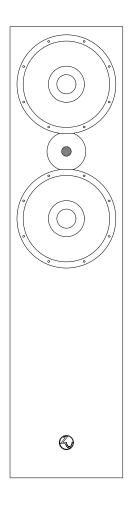
# OMEN DEF Mk. I-B

[Mk. I Rev-B]



AD COPY + SPECIFICATIONS

8 | 2013



ZU AUDIO OMEN DEF Mk. I [REV-B] LOUDSPEAKER SYSTEM SPECIFICATIONS + INFORMATION

Omen Def is already recognized as a rock-solid performer, so how do we make it better? We add more rock! We add more Definition. We've introduced our new super-duper, high-output, nano-sanctified 10" full-range drivers (as used in Dominance and Definition Mk.IV) to give even more dynamic shove and expression. The improvements from the new full-range driver aren't mumbo-jumbo, they translate into a loudspeaker that can energize any living room with the dynamics and scale of a rock concert yet still reveal the tiniest nuances of an intimate performance. Omen Def Mk. I-B does all this without bullshit "hi-fi" artifice and needs only a handful of watts to prove it. So if you want a speaker that delivers the music and just the music, you'll want Omen Def Mk. I-B. It's quite simply the biggest sound per dollar (pound, yen or euro) you've ever heard.

Omen Def is conceived and create on our Definition platform, but with our entry-level "Omen" production scale and price values. It's a speaker that can go toe to toe with many of the best loudspeakers in the world, is happy with the vast majority of amps, looks sweet, is built to last a lifetime, and all at a price that most working music heads can afford after a roof, wheels, and maybe a girlfriend.

Omen Def is about stuffing the bulk of the performance features of our super sweet Definition into a similarly sized loudspeaker but at a greatly reduced cost. Omen Def gives you 80% or more of the Definition's performance for roughly a quarter of the price. To get there sacrifices in sound are made, mainly in the superdeep bass area as you can see and hear when Omen Def and Definition are placed side by side. But hey, for the price difference, who's complaining.

So what's with the name? Omen Def feature the exact same full-range drivers used in Definition, uses the same dual full-range driver array, while reinforcing Omen series values of maximum sound for the money, with minimum stylistic extravagance. Whatever it's called the result is classic Zu—clean, simple aesthetics, attractive proportions and sound quality that'll blow your socks off.

Omen Def is suitable for solid-state as well as vacuum tube amplifiers—and able to mix it up with amp's from budget to high-end, and from flea watt to mega.

### OMEN DEF [MK.I-B] QUICK SPECS

Height: 47" [119.5 cm]

Footprint: 12 x 12" [30.5 x 30.5 cm] Weight: 78 pounds [36 kg] each

Bandwidth: 30 – 25k Hz

Efficiency: 100 dB SPL 1W, 1m

Impedance: 8 ohm

Power Amp Range: 2 – 400 watt Made In Ogden, Utah—U.S.A.

Omen Def Mk. I-B is the new standard—no apologies and no reservations. It's full-bodied, forceful, delicate, sweet and engaging—aggressive when appropriate, restrained and polite when required. And always seductive.

Omen Def over-delivers on performance, much more than all that Zu driver goodness and machined aluminum suggest. Omen Def is a combination of the technologies developed in Zu Definition loudspeaker, combined with the production methodology of Omen—the result is a standardized high-volume loudspeaker that delivers quality, performance, and good looks at a Zu-sane price. Our drivers, machine work, cabinetry, finish, assembly, packaging, all done right, right here in Ogden, Utah.



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Omen Def is quite simply one of the most versatile loudspeaker systems out there—its sensitivity and efficiency deceives small amplifiers into thinking they're power monsters, with resolution of tone and dynamic expression demonstrate clearly the benefits of moving up the amp' food-chain to more esoteric gear. Omen Def is built to last a lifetime: cabinet material, adhesives, driver assemblies... every component is a high quality part, creating a loudspeaker system to constantly remind you of the greatest gigs you ever attended....

Omen Def are built to last a lifetime: cabinet material, adhesives, driver assemblies... every component is a high quality part, creating a loudspeaker system that will continually satisfy and amaze, decade after decade.

### OMEN DEF MK. I-B ACOUSTIC TECHNOLOGIES

Third generation ZuGriewe electroacoustic loading ZuGriewe is a cabinet / driver / room acoustic impedance architecture. The technology was developed by Ron Griewe and Sean Casey, with its beginnings developed for motorcycle / automotive engine systems for improving power output through pulse and pressure management within an increased bandwidth.

#### **NEW ZU103ND/G1-16 FULL-RANGE 10" DRIVER**

This is the same driver we developed for and use on our flagship loudspeaker Dominance. The same driver is also being used on the Definition Mk.IV and Mk.III, delivering stunning attack, shove, resolution and bandwidth.

Features include a maximal motor for expanded dynamic contrast and reduced harmonic distortion; a lightweight neutrally-hung voice coil assembly with a paper/Kapton former; a linear inline layup of the inner cone for best resolution of detail; a diamagnetic shorting assembly for dynamic damping of the moving mass when playing at concert levels; nanotech-impregnated paper cones designed to support wide bandwidth; and a machined from billet phase cone with concentric maximal-length sequence diffusion for smooth high frequencies. All this is anchored to a heavy aluminum alloy frame with overbuilt bonded and riveted yoke/magnet/top-plate assembly.

The nano materials and application process reduce weight while increasing strength and propagation velocity without incurring any sacrifices in damping. We lay-up the paper pulp as a core material, and essentially infuse a liquid solid matrix over it. We use nano-processed and nano-engineered materials and key components in the matrix include nanosphere ceramic balloons, nanofiber cristobalite and amorphous fumed silica. Adhesives and binders include melamine, epoxy and nitrocellulose (aircraft dope). Bitting into the paper core is the first lay-up matrix of nanofiber cristobalite and fumed silica. On this you have a stratum of nitrocellulose and nanospheres. Moving past the lighter, stronger, higher velocity cone you have the Eminence made voice-coil assembly with is combination of paper, Kapton, copper windings and proprietary Eminence adhesives. The center "phase" plug is a carry-over from the research and testing we did with Essence, and gives this driver a more linear management of high frequencies and broader dispersion from the directly-coupled-to-voicecoil inner cone. And as dynamic contrast (to-the-max shove and pop) are of primary importance to us, we mated the new nanotech driver with the same super-tweeter assembly used in Definition Mk.III, reworking the high-pass filter a bit to blend smoothly with the high-resolution high-output full-range driver.

#### **FINISH**

Standard wood finishes for Omen Def are top coated by UV protecting premium grade conversion varnish. All finish work is done in Zu's custom finish shop.

#### TIPS ON GETTING GREAT SOUND FROM OMEN DEF MK. I-B

(Download the owner's manual, lots of good stuff in it.) Omen Def Mk. I-B loudspeakers now get 600 hours of high-intensity factory burn-in to ensuring they will sound great within just a few days of play.

Make sure you have 1/4" [6 mm] or so gap between the bottom of the loudspeakers and the floor. The finger ports are part of the ZuGriewe box loading technology. They are not ports as used in a bass-reflex design (Helmholtz resonators in all their forms) but the finger ports do need to see the acoustic space of the room. Blocking them turns the Omen Def into an interesting but "sealed" design.

In addition the installed ball-end footers (for use with hard surface flooring) Omen Def also ship with spikes to be used to punch through and anchor the speaker through carpets and rugs.

Thanks for your interest in Omen Def. Please don't hesitate to call or email, we love what we do and we are here to help.



### ZU AUDIO OMEN DEF Mk. I [REV-B] LOUDSPEAKER SYSTEM SPECIFICATIONS + INFORMATION

Mk.I-B Upgrade Detail Zu nanotech drivers are now standard equipment (Zu103ND/G1-16) these are the same units

> developed for our Dominance and as used on Definition Mk.IV and Mk.III. They feature our high-output motor assembly, 16 ohm magnetically neutral-hung voice coils and paper-cored nanotech cones. No other changes are done. Original Omen Def loudspeakers can be field upgraded. Markings for Omen Def Mk. I-B are: REV-B nameplate and the engraved model identification on the drivers' center cone.

High efficiency, high output, moderate impedance, direct radiating, floor-standing loudspeaker. Omen Design

> Def Mk.I-B features Zu's full-range driver (Zu103ND/G1-16), in the Zu Definition architecture, ZuGriewe driver/box/room acoustic loading technology, no crossover or filters on full-range drivers, complimented by a dynamic tweeter featuring phenolic-composite dome and machined 6061-T651 billet lens,

providing the acoustic sparkle and resolution from 10kHz and up.

Production August 2012 (Mk .I-A November 2010)

H W D 47 x 12 x 12" [119.4 x 30.5 x 30.5 cm]

Footprint 12 x 12" [30.5 x 30.5 cm] Weight 78 pounds [36 kg]

Packaged FlexPak, one loudspeaker per shipping box, 84 pounds [38 kg]

**Driver Complement** 2x Zu103ND/G1-16, 10-1/3" full-range nanotech driver in Zu Definition array covering 30 - 12k Hz

Zu/U-APT-L2 tweeter assembly

0.5% driver pair matching, 0.1% on all other electrical components **Component Tolerance** 

5-Way Binding Posts (CE compliant) accepting: 1/4" spade [6.3 mm fork], 5/16" spade [8 mm fork], bare wire ≤ #4 AWG, banana plugs

> Efficiency 100 dB SPL @ 1W, 1m

Impedance 8 ohm, nominal full bandwidth (5 ohm minimum at 270 Hz)

Average Room / Moderate Volume 2 - 4 watt

Large Room / Loud 4 - 16 watt

Large Room / Concert Level 16 - 50 watt Max Music Input Power 400 watt Max sustained RMS Power 300 watt

Bandwidth

30 - 25kHz **Horizontal Acoustic Center** 35" [89cm] **Horizontal Listening Window** 45°

**Vertical Listening Window** 20°

**Full-range Driver Network** 

**Super-tweeter Network** 2nd order Bessel @ 10k Hz acoustic

> Internal Cabling Zu Mission hookup wire, pure copper

> > Cabinet North American made high-density comp-60 composite, skinned with real wood veneer

Spike / Feet Insert Thread 3/8-16 TPI (9/16" hex nut, 14 mm wrench can be used but is tight)

Included With Loudspeaker hard surface ball-end footers installed with S.S. 9/16" jam nuts, also included are carpet spikes

**Manufacturers Country Of Origin** U.S.A. [98%]

> Life Expectancy 100 years plus, all parts

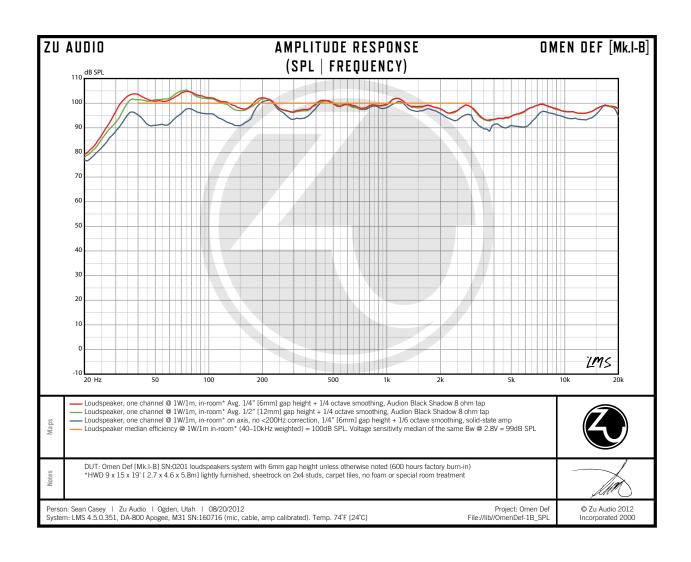
Compliance CE | RoHS | WEEE

**Warranty & Service** 5 years limited on cabinet and drivers-warranty does not cover misuse, abuse, components upstream

from the loudspeaker system, modifications or non-factory service.

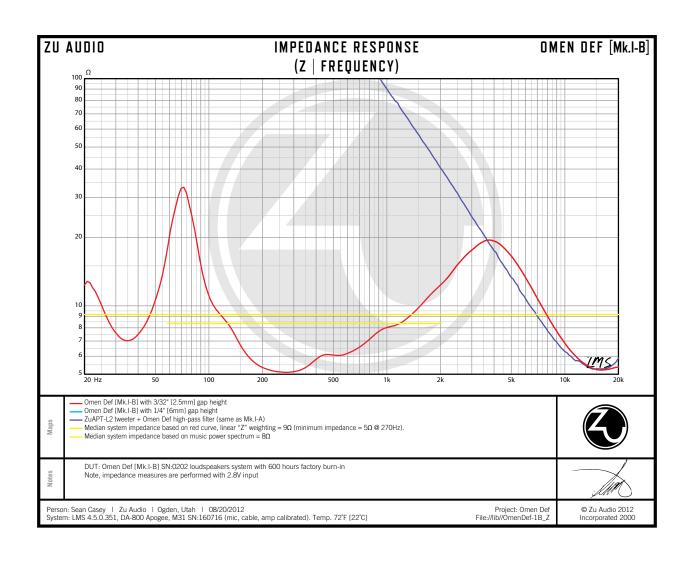


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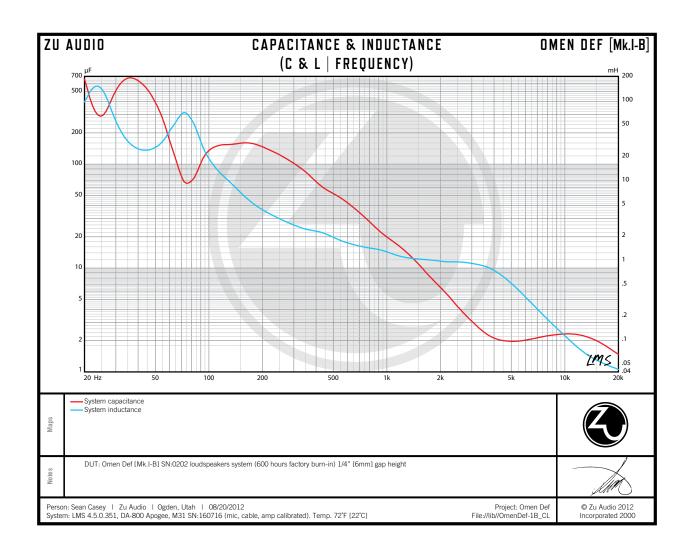


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### **WARRANTY**

Zu products are designed and manufactured to the highest quality. However, if something does go wrong Zu will fix or replace the product free of charge. Zu Omen Def Mk. I-B loudspeakers have a five year limited warranty from date of purchase to original owner. If under normal home use you have any problems with drivers, cable, parts, cabinet, we will fix or replace the product. Loudspeaker warranty and service can usually be performed by the user, also known as DIY service, in such cases Zu will provide full technical support. This provides faster repair of product (reducing down time is always good), minimizes handling hassle and damage potential to both Zu and you, and reduces shipping costs.

Zu loudspeaker finish warranty covers color changes in paint, finish checking, and oxidizing. While we use the highest quality UV protecting topcoat finishes, we cannot guaranteed against fading and you should keep them out of direct sunlight, just like a piano. While every effort is made to ensure a perfect finish that will last a lifetime, this warranty does not cover damage from impact and abrasion, or seam / core construction visibilities in extreme high temperature / high humidity environments. Zu products are designed to be used in temperature and humidity controlled environments, namely your home or office unless otherwise stated. Warranty does not cover loudspeaker finish damage caused by the extremes of an uncontrolled environment.

If in the highly unlikely event that a Zu product arrives to you dead on arrival (D.O.A.), and after discussing it with a Zu tech, we will ship another of the same product at our expense and arrange for the D.O.A. product to be collected. If after inspection we find that you have misrepresented a returned product's condition, and that it was improperly handled or used, Zu will charge you for all damaged parts, labor, shipping and handling of the product.

Warranty does not apply to damage caused by operating the product outside the intended use, accident, another product, misuse, abuse, flood, fire, earthquake or any other external causes. Warranty does not cover damage caused by modification or service performed by anyone other than a Zu representative. Cosmetic damage is also excluded from warranty, as is all product that has any part of the Zu serial number removed.

When a product or part is exchanged the replacement becomes your property and the suspect or damaged part becomes Zu's property. Parts provided by Zu must be used in products for which the warranty service is claimed.

### WHAT YOU CAN EXPECT IF WARRANTY SERVICE IS NEEDED

If warranty becomes necessary, you must call or email for a return of material authorization (R.M.A.) number, or to arrange for user serviceable parts. This provides opportunity to assist in diagnosing the problem and helps us to schedule for rapid turnaround in the event that parts, service or repair is needed. Upon factory inspection of parts or product, warranty eligibility will be determined. While service options, parts availability and response times will vary, we do our best to keep you happy. International customers should know that Zu will comply with all applicable export / import laws and regulations, you may be responsible for custom duties, taxes, broker fees, freight, and other charges. When shipping of product or part is required, repackage the complete product, or part, in its original packaging. If you have any questions about packaging please call or email. Product damage caused from incorrect repackaging is not eligible for refund or warranty and the freight company may also reject your insurance claim. Until we have the product back in the shop and sign-off that it is eligible, the product is still your property, we recommend you insure or declare the full value when shipping. We also recommend that you only ship with a freight company that has a good reputation and offers tracking and insurance for the full amount.