

# Bookshelf Speaker Kit v1.0

Ojas Bookshelf Speaker with JBL 328c 8" Coaxial Unit

Passive speaker. Recommended amp power 3 - 100 watts

16" h x 14" w x 12.5" d

Frequency Response\*: about 50 Hz - about 18 kHz

Sensitivity: 98 dB

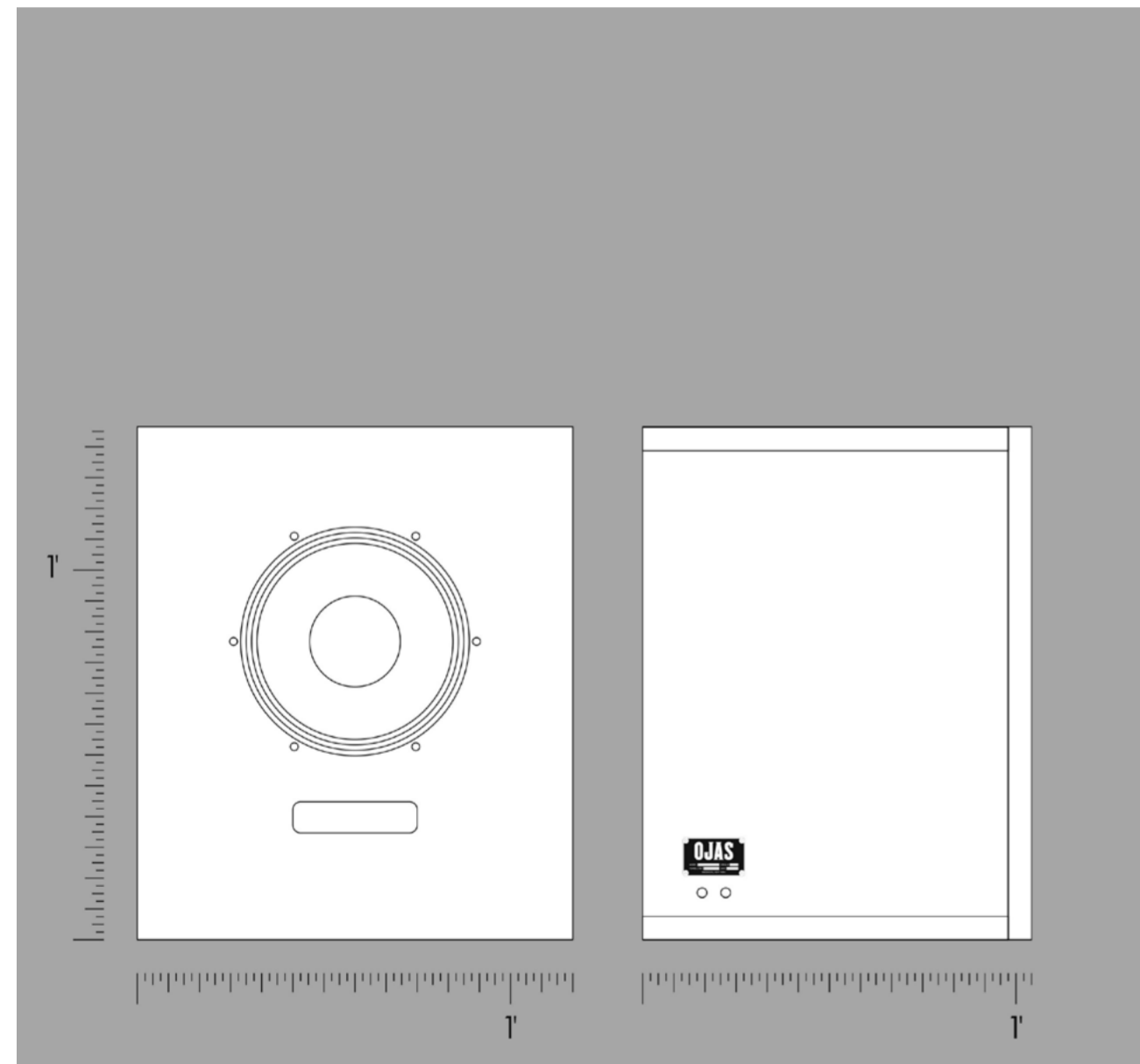
Nominal Impedance: 8 ohms (minimum 6 ohms)

Recommended Power: 3-100 watts

\*This item is a complete speaker kit, including all hardware, components and flat packed unfinished Baltic Birch plywood cabinet.

Required Tools:

- Electric screwdriver, drill or universal screwdriver handle (not included)
- 5/16" wrench or compatible adjustable wrench (not included)
- Lamelo 4mm ball head hex driver (included)
- Wood Glue (included)
- Hammer or mallet (not included)
- Lint free rag (piece of old tee shirt)



# Description:

Ever since my 200 pound, refrigerator size, speakers started showing up in public and in the press I've heard the same thing over and over: "Why can't you just make some bookshelf speakers that fit in my apartment?"

Of course, it doesn't take a wizard to make a bookshelf speaker and I am constantly experimenting with smaller designs. But I couldn't find a package that I felt really represented what I am after: wide range, present sound with great speed and life-like dynamics. I've finally found my solution, and it's an unusual one, so I'd like to give you some context to how I arrived here:

In the early 2000s I was working in Tokyo, where Nom de Guerre had a development studio. I would frequently make the rounds in Akihabara, the Mecca of Japanese "audio maniacs." Hino Audio, one of my favorite places to get fresh inspiration, had 4-5 different storefronts on one street--one was only vintage horns, the next only turntables, tubes... one was only DIY speaker building supplies and they had many demos. I happened to hear them demoing a very beautiful sounding 12" coaxial driver. The speaker was obviously a new production unit, but had a lot of the attributes of the vintage gear that I'm drawn to and inspired by. I asked what it was and it was the JBL Professional 322c, a 12" ceiling speaker that's usually installed in large high quality commercial projects like airports, theaters, etc. The driver is beautifully built and has a classic JBL sound, but it's mostly unknown in the HiFi world because it's not marketed for this purpose.

On a whim I ordered the 328c, the 8" little brother of the 322c. It didn't take long to realize that this was my solution for a small speaker. It has really great transparency and imaging. Wide range enough to stand alone as a 2 way, or play above a sub for the bass heads.

\*\* Just the other day I was thumbing through my collection of Japanese Audio magazines and I made a very vindicating discovery: the Winter 2009 Stereo Sounds special "Tube Kingdom" edition has a classic 20 cm (8") driver shootout and they included the 328c. This is the only other reference I've found for 328c used in HiFi and the review appears to be glowing. Some of the highlights include, "it sounded like a classic JBL machine... Horns fill the space... No coloration... Subtleties that I thought could only be heard with a field coil type unit, but very surprised to hear from a permanent magnet speaker... The band is balanced, fine and the resolution is high... Very high level balances... I think that it can be used as a studio monitor, although it is meant to be installed equipment."

The power rating on this speaker is 250W peak, but I run it on my 4W 2A3 tube amps and Class D amp as low as 15W, with satisfying room filling sound.

The 328c comes with a mounting plate with tuned ports for ceiling installation. We have designed the cabinet with our own tuned port, so we just separate the speaker unit from the plate and get rid of the plate.

For those of you wanting deeper bass we will be offering a sub kit that's matched to this speaker soon.

OJAS is the creative pen name of Devon Turnbull. As a university student studying Audio Engineering he started using the name across a variety of disciplines including graffiti, music, graphic design and clothing design. In 2003 Turnbull co-founded the clothing brand Nom de Guerre with Isa Saalabi, Wil Whitney and Holly Harnsongkram. For the next decade, while primarily working in fashion, the name OJAS was kept alive on sound sculptures Turnbull was crafting for himself and a growing number of audio enthusiasts around the world. With a particular interest in high efficiency speakers and low powered tube amplifiers, Ojas audio equipment aims to bring realistic, natural sound to the listener. These products are the result of two decades of experimentation, engineering and explorations in the audio underground.

# OJAS