

# The AudioBeat

## Audio Research • Reference CD8 CD Player

by Marc Mickelson | January 5, 2010

Audio Research, that pillar of high-end audio, introduced its first CD player, the CD1, in 1995. At that time, designing and manufacturing a CD player not only made good business sense, it was an investment in the future. CD was the hot musical format for audiophiles and civilians alike, and Audio Research had already created a few well-received separate digital-to-analog converters, so an integrated CD player (and a separate transport based on it, the CDT1) was the obvious next step.

Since the CD1's introduction, Audio Research has refined its approach to digital sound. The CD1 and the players that followed were fully solid state. With the release of the first CD player in its Reference series, the CD7, in 2005, Audio Research married its core competency -- tubed circuits -- to digital playback. I owned a Reference CD7 and loved its big, buxom sound. I was surprised, therefore, when the Reference CD8 was introduced in late 2008. I figured an upgraded version of the CD7 would follow, not a wholly new model. But the CD8 is so profoundly different from its predecessor that upgrading wouldn't be possible.

The two players look ostensibly the same. Both are top-loading units that exude the classic, stylish Audio Research handsomeness, which has become the most immediately recognizable look in all of high-end

audio. The Reference CD8 adds a small front-mounted LED, which indicates that it is on even when its display is off, and that's the only outward difference between the CD7 and CD8.

The real changes happen inside. Primary among them is a switch from a Cirrus/Crystal CS4396 Delta-Sigma

right corner. You don't expect to see an amplifier output tube mounted inside a CD player, but there it is. CD7 owners can have the new power supply added to their units, except for the use of a physically smaller 5581 tube instead of the 6550C. It's a worthwhile upgrade, given that the 5581 is more reliable than the pair of 6H30s it replaces and lasts longer as well.



The CD7 and CD8 use the rugged and reliable Philips CDM PRO2 mechanism, which means that both players remain top-loaders, a magnetic puck holding the CD in place during playback. If you forget the puck, you'll be reminded of your oversight by the sound of your CD careening around inside the compartment.

digital-to-analog chip to a Burr-Brown PCM1792, both implemented in a fully balanced configuration. Both DAC chips can handle digital data up to 24 bits and 192kHz, but neither the CD7 nor CD8 makes use of upsampling, as the people at Audio Research simply don't like its sonic effect.

As big a change as the new DAC chips is the new power-supply-regulation scheme in the Reference CD8. This is taken from the Reference 3 preamp, and it has one outward feature that you'll notice right away when you remove the CD8's top cover: a single 6550C tube mounted horizontally in the front-

Both players reclock all analog and digital output and make use of proprietary "electronic 'jitter-stripping' techniques" to minimize the deleterious sonic effects of jitter - a prominent issue in 1995 that's a little less so today, due to greater understanding of how to combat it.

The CD8's remote control is identical in size and shape to that for the CD7, but there are a few extra buttons for new features. These include two buttons for intensifying and dimming the player's vacuum-fluorescent display, including fully off, which produces slightly better sound, and the mysterious STDBY button. Normally, I would surmise that this

powers down certain parts of the player, most likely the tubes in order to increase their life. What it seems to do is turn the display off and prevent you from playing any music, while keeping the player fully powered. From the manual: "Turns off the display and prevents operation of the CD8. Unit remains on." Once the CD8 is in STDBY, you can push the on/off button on the CD8's front panel to power the player down completely, or you can push STDBY again to bring the player fully back to operational life.

The explanation of this "feature" is a simple one: The CD8 uses the same remote as Audio Research's CD5 CD player, which does have a proper standby mode. The button simply works in a different, and odd, fashion for the CD8. Ignore it is my advice.

As with all Audio Research products, the Reference CD8 is available in black or traditional silver finish, which the folks at Audio Research have always called "natural." In the past, "natural" products came with black handles, and you can still order the Reference CD8 that way. However, Audio Research now offers "silver" handles (this is what they're called at the factory) that mirror the look of the "natural" faceplate. These really dress up the CD8 -- as well as other newer Audio Research products. As one person in the audio industry declared, "It's not Audio Research if the faceplate is black." I guess this now goes for the handles as well.

### Sonically speaking

**A** guiding principle of Audio Research's design work is the sonic efficacy of balanced circuits. I've found through much experience that going balanced has its most obvious sonic consequences with source components, where the difference between the balanced XLR and single-ended RCA outputs can range from apparent to stunningly better. With the Audio Research Reference CD7, the balanced outputs produced purer treble, a more linear-sounding midrange, and bass that was more punchy, while the single-ended outputs increased that player's inherent warmth, imparting a soft

glow that veiled fine detail and the impressive soundstage to some degree.

Thus, as with the CD7, I expected the CD8 to sound its best by no small margin via its XLR outputs, but that wasn't the case. While I *preferred* the XLR outputs because they seemed to maximize all that the CD8 did to its best advantage, the RCA outputs sounded basically identical. Oh, single ended the CD8 was a touch more relaxed and less vivid, but its sonic core remained intact. Paired with a great single-ended-only preamp like the Convergent Audio Technology SL1 Legend, the Reference CD8 did not make for sound that was soft or veiled. Rather, the presentation was slightly different -- more corporeal and relaxed, slightly less up front and lively -- than with the Audio Research Reference 5, either single-ended or balanced.

While I have strongly recommended with other fully balanced digital players that you use them as they were designed and intended, via their balanced outputs, this isn't mandatory with the Reference CD8. The engineers at Audio Research could explain what has changed in this regard from the CD7, but I will speculate that it's a matter of the two players having different sonic signatures to begin with -- and the CD8 embodying a collection of traits that mates better with preamps from different makers and of differing technologies.

Whether heard through the single-ended or balanced outputs, however, the midrange of the CD8 immediately reminded me of another Minnesota export's -- Ralph Karsten's Atma-Sphere OTL amplifiers. The see-through directness and clarity allowed information in the music's most expressive frequency band to parade in unadulterated fashion -- fully energized and bristling with animation. There was the sort of image dimensionality that I attribute to tubes, but certainly no tonal aberrations, such as obvious warmth or fullness.

*One Man's Music* [self-released, [www.vincebell.com](http://www.vincebell.com)] is both a CD and book, the latter being the autobiography of singer-songwriter

Vince Bell, whose songs are tuneful lessons in emotional literacy. The CD collects both new and old songs with lyrics that achieve moments of poetic beauty. Bell's voice, throaty and soft, is not easy to reproduce, but no captured vocal detail stands a chance against the Reference CD8's extreme midrange faithfulness. Although Bell didn't write "Frankenstein" (it's by fellow Texan Gary Burgess), it has become his personal anthem, as its lyrics take on great meaning when you know about the life-threatening injuries Bell suffered in a car accident and the physical state he was in afterwards. The CD8 brings "Frankenstein" to life -- almost literally -- Bell's voice and guitar taking on an eerie, expressive immediacy. If it's on your CDs, you *will* hear it with the CD8 -- with master-tape-like fidelity.

But this is not just relegated to the midrange. The CD8's treble is extended and true to the energy of live music, and the bass is detailed, well controlled and deep. It's an all-consuming fidelity, not limited to one frequency band. I continue to marvel at Jenny Lewis's *Acid Tongue* [Warner Bros. 508668]. I've been listening to it nearly nonstop since I bought it a few months ago, both for the gritty songwriting and pellucid sound. The CD8 turns *Acid Tongue* into the rarest of demo material -- a folk-rock romp whose edgy guitars, monster bass line and thumpy drum kit are reproduced with amazing realism, a rarity amidst so much similar music that has been poorly recorded or dynamically squashed. With the CD8, there is speed and lifelike edge to the guitars, a silken sheen to Lewis's vocals, and some center-of-the-earth power to the kick drum. *Acid Tongue* is also available on LP, and I haven't felt the least desire to buy it because of the CD's extraordinary sonics. The CD8 has played a role here as well, making this LP seem superfluous.

All of the Audio Research products that I've heard, and that's approaching a dozen amps, preamps, CD players and phono stages, present the music with an enormous physical presence -- wall to wall and treetop tall, so to speak. This is something that tubes achieve in general, but not all tube products pull off equally well. The CD8 upholds

this tradition, stretching the soundstage laterally beyond the speakers' positions and offering depth that seems to be a giant step greater than the competition, perhaps because the front edge of the soundstage is closer to the listening seat.

I was anxious to hear Warren Zevon's *Learning to Flinch* [Giant 24493] on the CD8. I was at one of the concerts from which this CD was compiled, and I remember the experience very well. Zevon provided his own accompaniment on guitar, piano and electronic keyboard. An amplified twelve-string guitar, which is what he played, can cut through the air with intensity that rivals a pure electric. But it was the characteristic sound of the venue, a converted movie theater, that I remember best -- the way in which one performer seemed to fill every inch of a large building. The CD8 did the same in my large listening room, with some help from the ancillary electronics and especially the speakers, of course. With either the Wilson Audio MAXX 3s or Vivid Audio G1 Giyas, the soundstage was deeply layered and fully populated, including behind the speakers themselves. Zevon's vocals and playing were vigorous and forceful, even more so at a volume approaching concert level, which is far beyond where I normally listen.

It was the relentless totality of the experience of listening to music with the CD8 that made it significant, the sense that this player captured the music as it was recorded and portrayed it in a way that transcended the digital medium. While *Acid Tongue* and *Learning to Flinch* displayed the CD8's copious strengths particularly well, it is not a CD player that favors one type of music. It has no forgiving plushness, and it's not ruthless in its presentation of recordings old or new. I discovered a great test for this by accident. I had heard about how much better the remastered versions of the Beatles albums were, but I only became a believer when I bought *Abbey Road* [Capitol 0946 3 82468 2 4]. I have three or four different vinyl versions of it and the first CD issued in the late 1980s. Of all the LPs I have, the orange-label Capitol pressing [Capitol Records 119001] sounds the best -- better

even than the Apple pressings. The new CD is neck and neck with this LP, restoring its natural musical flow and uncompressed dynamics. I pulled the older CD out for comparison, but there was none. It was the same music but certainly not the same sound.

Ultimately, the CD8's contribution was that it didn't make a contribution, thereby letting the music's truer sonics bloom to their full extent. We've all heard "Come Together," "Here Comes the Sun" and "Carry That Weight" a thousand times, but I was gobsmacked, as the British would say, with them *this* time.

#### Versus

I've already talked a bit about the Reference CD8's predecessor, the CD7 (\$8995 when still available), and it's important to be clear that the difference between the two players isn't simply a matter of the newer one being better (which it is). They have rather different personalities, the CD7 sounding darker, fuller and more forgiving, and the CD8 adhering more closely to the neutral ideal, while also showing off a lusciously honest midrange and better-defined bass. I am not about to slag the CD7; I enjoyed its sound tremendously. It may also be even better with the upgrade to the 5881 in its power supply. However, there was no doubt that the CD8 had less of an overt personality while still presenting music in a very enjoyable way. Whether the CD8 represents evolution or revolution I can't say, but I know it shows distinct improvement in some specific areas.

I spent much more listening time, however, comparing the Reference CD8 to the Zanden Model 5000S DAC (\$18,250) and Model 2000P transport (\$30,250). If you're doing the math in your head, you've realized that these Japanese beauties cost nearly five times the CD8's price. What makes the Zanden combination sonically significant is rather different from what the CD8 accomplishes with such success. It is the most analog-like digital gear I've heard. Detail retrieval is high, but the elements of each recording are presented in a completely relaxed, natural way. With the Zanden

separates, the music simply *is* -- unforced and unemphasized yet vividly present. This is a real accomplishment and something I've not heard another digital product equal as completely. Often, digital gear that sounds relaxed also obscures fine detail; and when it sounds highly detailed, it's also unforgiving of mediocre and poor recordings, and it can sound spot-lit -- even relentlessly so -- with the best-sounding CDs.

Aside from being a two-unit digital front-end (with four separate chassis, including the separate power supplies), the Zanden DAC and transport have some unique design features. The DAC uses long-out-of-production Philips TDA-1541A Double Crown DAC chips that offer CD resolution only. It connects to the transport via a proprietary I2S scheme, which addresses the deleterious effects of jitter. The DAC uses tubes -- a single 6922, 6DJ8 or 7308 in its output stage (a new-old-stock 7308 comes installed), and two 6CA4s along with a single 6X4 in its tube-rectified power supply -- and the transport has a clock output for syncing other digital components. If you wonder why the 5000S and 2000P cost so much, all of this provides some of the answer.

*Acid Tongue* over the Zanden combo shows immediately how different its presentation is from that of the CD8. Some of the raucous power of the music and recording was reduced, and the soundstage wasn't quite as all-consuming as with the CD8. The CD8 was also more controlled -- and powerful -- in the bass and more immediate through the mids. All of this should come as no surprise, I suppose, given what I've already written about the player. But then there's that effortless, analog-like retrieval of detail with the Zanden separates, a graceful ease from which the music simply unfolds in realistic manner. While the guitars on "Pretty Bird" lacked some of the growl they had with the CD8 and Lewis's high-pitched vocals seemed less pristine, the music had an endearing, sprightly way about it. All of the detail was there, but its proportions amidst everything else happening were such that none of it was highlighted or presented with unnatural edge or speed. This sound wasn't soft by any means, just

extremely well balanced. Particulars were overshadowed by the whole.

The differences between the Reference CD8 and Zanden separates come down to particulars, however. Stated another way, the two are competitive but far from sonically identical. So it goes with high-end audio: One great product almost never clearly outdistances all others in its sonic peer group. But there's no denying that the price of the Reference CD8 puts it very near or at the head of the price-performance subcategory.

As part of your system

**W**ith the Reference CD8, Audio Research reasserts an understanding of digital technology that equals the mastery on display with its best preamps and amps. While I did a great deal of listening to the CD8 in reviewer mode -- picking apart its character, parsing every detail, and closely comparing it to its competition -- I found that it was very easy to get lost in its sound. Recording after recording sounded distinct and musically consonant, and

even with such extreme midrange honesty, the CD8 didn't call attention to itself. It wasn't gentle or aggressive, warm or cool, lean or fat, and for this reason it will help achieve a happy sonic result in many, many audio systems.

Digital sound has progressed enormously since 1995, and in this technology race Audio Research appears to be both ahead of the curve and ahead of the pack. The CD8 has earned the right to wear its "Reference" moniker proudly. 🎧

Price: \$9995  
Warranty: Two years parts and labor.  
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#### Associated Equipment

Digital: Ayre Acoustics C-5xeMP universal player, Zanden Audio Model 2000P CD transport and Model 5000S digital-to-analog converter.

Preamplifiers: Audio Research Reference 5, Convergent Audio Technology SL-1 Legend with phono stage, Zanden Model 3000.

Power amplifiers: Audio Research Reference 110 stereo amp, Zanden Audio Model 9600 and Lamm Industries M1.2 Reference monoblocks.

Loudspeakers: Wilson Audio Specialties MAXX Series 3, Vivid Audio G1 Giya.

Interconnects: AudioQuest William E. Low Signature, Shunyata Research Aeros Aurora-IC, Zanden Audio interconnects.

Speaker cables: AudioQuest William E. Low Signature, Shunyata Research Aeros Aurora-SP, Zanden Audio speaker cables.

Power conditioners: Shunyata Research Hydra V-Ray Version II, Essential Sound Products The Essence Reference.

Power cords: Shunyata Research Anaconda Helix CX and Python Helix CX, Essential Sound Products The Essence Reference, Zanden Audio power cords.

Equipment rack and platforms: Silent Running Audio Craz 4 Reference isoRack plus and Ohio Class XL Plus2 platforms (under Lamm amps), Harmonic Resolution Systems M3 isolation bases under digital gear.