

# SoundStage! Equipment Review - Audio Research Reference Two Mk II Preamplifier (11/2001)

November 2001

## Audio Research Reference Two Mk II Preamplifier

by Marc Mickelson



### Review Summary

<b>Sound</b>	"Warmish tonal signature and big soundstage" -- "a soundstaging champ," in fact; notable image focus, "voices in particular are dimensional, detailed and <i>human</i> "; bass is "a tad overripe on the ultimate scale," but powerful and weighty too.
<b>Features</b>	Fully balanced design that can accommodate single-ended sources and amps; tube circuitry featuring 6H30 tube; remote control.
<b>Use</b>	Matching with a "complementary" amp is important to get the most from the Reference Two Mk II, one with plenty of power and no bass ripeness.
<b>Value</b>	"For the fan of music and convenience."

Some audiophiles question the need for an active preamp, citing the use of a single line-level source as well as the desire for complete transparency as their reasons. Some gravitate toward passive units or attenuators, and I've heard good things about these -- but have never heard good things *from* them. For my ears, the gain of a preamp is essential, and even though I am fully digital, I like the convenience of connecting more than one source component too.

Thus an active preamp is about sound as well as functionality, and manufacturers have been keen to pick up on these two important qualities. Audio Research's Reference Two Mk II is the most full-function preamp I've had in my system, with

balanced and single-ended inputs and outputs, and all of its useful functions available via remote control. It's the top-of-the-line model in ARC's stable of preamps, tubed of course, and as such it's one of the preamps audiophiles need to hear if they're lucky enough to be shopping in its \$9995 USD price range.

## **Particulars**

As its model designation indicates, the Reference Two Mk II has predecessors, and the current unit represents the furthest refinement of the base circuit. The greatest difference between the standard Reference Two and the Mk II version is the use of the 6H30 tube, a hot-rodded audio tube first used by Balanced Audio Technology in its preamps. In the case of the Reference Two Mk II, six 6H30s replace nine 6922s. The upgrade from Reference Two to Mk II status costs \$2995, \$4995 from Reference One to Reference Two Mk II. Having visited Audio Research and seen what an "upgrade" involves, I can say that the high price seems justified given that the entire unit is disassembled and then rebuilt. Of course, owners would likely be happier if no upgrade were required, but the high end is about pushing the performance envelope, and Audio Research has come to define this frame of mind over the course of its 30+ years in business.

The Reference Two Mk II is a large single-box fully balanced preamp measuring 19"W x 7"H x 15 1/2"D and weighing 31 pounds. Audio Research-supplied specs are impressive: .5Hz-60kHz frequency response, less than .015% distortion, noise that's 100dB below the 2V RMS balanced output. The Reference Two Mk II's internal cavity is divided into three sections, with four separate circuit boards occupying the space: the micro/control circuitry in front, then the power-supply board, the audio section, and finally the input/output relay section at the rear. The circuit boards are isolated from each other to reduce the chance of sound-degrading interactions. This layout also gives ARC engineers more room than a single circuit board while allowing for modular upgrades.

Tubes used are the previously mentioned half-dozen 6H30s along with a single 5AR4 and 6L6GC in the power supply. Estimated tube life is 4000 hours. Of particular note is the Reference Two Mk II's gain control, which is actually a spring-loaded two-way switch that adjusts the volume either a step at a time (in 125 increments!) or continuously. A ring of LEDs around the edge indicates the volume level of the preamp. The balance control works the same way, with many fewer adjustment increments. Also on the front panel are input and record selectors along with the power on/off, mute, and phase switches. There is also a switch for determining if a particular input will operate from its balanced or single-ended inputs. This kind of flexibility in what is a fully balanced design certainly adds considerably to the Reference Two Mk II's cost, but ARC provides it because not everyone is fully balanced. (Speak for yourself!)



The Reference Two Mk II's rear panel is absolutely packed with RCA and XLR inputs and outputs -- only a surround-sound processor will rival it for sheer number of jacks. There is also an IEC power-cord receptacle, fuse holder and +12VDC output jack that provides continuous voltage for remote-start electronics when the Reference Two Mk II is on.

One note about packaging. Some companies have gone to shipping expensive products like the Reference Two Mk II in wooden crates for added protection from the unsympathetic freight handlers. Audio Research, on the other hand, has devised a way to ship their pricey electronics in cardboard boxes, and the results are no less protective but certainly less costly. This method seems as engineered as the products themselves -- one box inside another with specially designed packing around the unit and Styrofoam around the internal box. ARC also packs their tubes in foam bricks and puts them inside each unit for further protection.

## System

The Reference Two Mk II resided in my reference rig, which consists of Wilson Audio WATT/Puppy 6 speakers, Lamm ML2 mono amps, Mark Levinson No.39 CD player, and Bel Canto DAC1.1. Cables most often in use were from Acoustic Zen (Hologram and Silver Reference), Ensemble (Megaflex and Dynaflex), and DH Labs (Q-10 and Air Matrix ), with power cords from TARA Labs (The One and RSC Air) and Shunyata Research (Python). In addition to the Lamm amps, the Reference Two Mk II saw

action with the Audio Research VTM200 and Atma-Sphere MA-1 monoblocks, rounding out an all-Minnesota preamp/power-amp combo. Additional speakers included the Wilson Audio Sophia -- the next item on my review plate. The preamps and DAC rested on Target equipment racks, while the amps had their own Bright Star Big Rock bases. The CD player/transport had the same with a Townsend Seismic Sink in between. The things we audiophiles do for our CDs....

For comparison, I had my Lamm L2 Reference preamp on hand, a worthy tubed foe for the Reference Two Mk II.

## **Use and listening**

If you've never used a preamp with the features and full remote control of the Reference Two Mk II, you don't know what you're missing. No more wearing a path to your equipment rack to make a change or adjustment. In addition to control of the volume, source selection and balance, the Reference Two Mk II's remote lets you change absolute phase from your listening chair, which is a *great* feature (the Mark Levinson No.39 does it too). Using the preamp was a snap even with having to tell it if a source component is single ended or balanced, which requires just the flip of a front-panel switch. About the only feature missing is a phono input, but I'm sure anybody likely to buy a Reference Two Mk II would want to shop around for a separate phono stage -- if one is needed in the first place, that is.

Right away it was easy to hear that the Reference Two Mk II has a warmish tonal signature and big soundstage, both of which give it a distinctive character. However, as I spent more time with the Reference Two Mk II, I discovered that while these traits were quickly apparent, they did not wholly define the Reference Two Mk II's sound. There is more to this very fine line-stage preamp, and the more I listened, the more I discerned about the Reference Two Mk II's way of reproducing music.

First, the large soundstage, which is a sonic hallmark of Audio Research equipment. With amplifiers and speakers up to the task, the Reference Two Mk II will fill a space with sound that stretches from beyond the speakers right to left and as far forward and back as possible. While some preamps are good at lateral spread and others at soundstage depth, the Reference Two Mk II is proficient at both of these, though not because some part of the spectrum is emphasized. I use Television's eponymous CD [Capitol 100197] to discern a pieces of equipment's spatial performance, and the Reference Two Mk II portrayed this CD as well as any preamp I've used, albeit in a larger, more grand fashion. I don't know if bigger or smaller is more accurate, but the Reference Two Mk II makes a strong case for its portrayal because of its layering and the sounds it places outside the speaker positions.

The Reference Two Mk II's focus on performers and instruments in the soundstage is truly of, uh, reference quality and further helps cement the idea that this preamp is a soundstaging champ. Images have a just-right quality to them, and voices in particular are dimensional, detailed and *human*. Lucinda Williams' *Essence* [Lost Highway 088 170 197-2] has been seeing lots of play on my system, and her vocal on "Blue" via the Reference Two Mk II is heartfelt and a little raspy in spots, just what she was after, it's clear. The vocal is present to such a degree that it's hard not to be completely involved in the music, no small accomplishment.

The Reference Two Mk II's warmth is not at all bothersome as long as the preamp is paired with a complementary amp. What would one of those be? First and foremost, an amp from ARC like the VTM200 monoblocks I reviewed a few months back or the Atma-Sphere MA-1 monos, which I'll be reviewing very soon. These are not obviously sweet or full-sounding amps, so there is no excess in either of these two areas. However, the Lamm ML2s, on the other hand, did not make for a good pairing, not so much for their tonal signature but rather their very modest power. A preamp like the Reference Two Mk II thrives with power, and the Lamms, for all their sonic pluses, just don't offer an abundance of juice. I've had problems with the Lamms and a few speakers, but this is the first time an electronic component seems mismatched with the amps.

Thus the Reference Two Mk II is at its best with an amp that has some serious power, which shows off its own dynamic prowess. Feed it rock and roll or especially orchestral music and it rewards with a sense of scale and ultimate volume level that are stirring. Lovers of classical music surely rejoiced at the addition of classical titles to the JVC XRCD catalog. Beethoven's Symphony No.7 conducted by Fritz Reiner [Victor JMCXR-0005] was recorded in 1955, and while the master tape does have some obvious hiss and a few ticks, the sound of the CD is very good overall and the reading is historically important. The massed strings at the beginning of the first movement are powerful and detailed through the Reference Two Mk II, and the sheer volume they are able to achieve with either the ARC or Atma-Sphere amps scales in a lifelike manner, from soft to very loud at an instant. Great stuff.

If there is an Achilles heel to the Reference Two Mk II's sound it is its bass, which is plenty deep but a tad overripe on the ultimate scale, which is what a preamp like the Reference Two Mk II deserves comparison to. And again, with the Lamm ML2s, the bass takes on a bloated, ill-defined quality that will signal you have something amiss in your system. But when things are right, as I discovered with the VTM200 monoblocks, there is real power and weight to the Reference Two Mk II's bottom end. Bass favorites like Spain's *The Blue Moods of Spain* [Restless 7 72910-2] and Suzanne Vega's *Nine Objects of Desire* [A&M 3154 0583 2] will have you feeling the

power throughout your living space.

There are functional and sonic reasons that audiophiles will gravitate to the Reference Two Mk II -- the remote control and smooth operation, the large soundstage and engaging sonics. The Reference Two Mk II is the antithesis of hi-fi sound, but the scale and power it will convey with the right amps put it squarely in the upper echelon of preamps currently available. But a more intangible aspect of its sonic performance is the sheer involvement it engenders. Audio Research has always maintained a reputation for ultra fidelity with its products, and while the Reference Two Mk II won't harm this, it is for long listening sessions with your favorite music, not quick auditions. It's for the fan of music and convenience.

### **Tube preamps on parade**

A natural comparison piece for the Reference Two Mk II is the Lamm L2 Reference -- maybe. I am willing to concede some doubt because the Lamm preamp costs almost \$4000 more than the Reference Two Mk II, and an audiophile stretching for the ARC preamp would likely not consider the Lamm. Both are fully balanced designs, but the Lamm L2 has only balanced outputs. I can only speculate, but perhaps the cost of providing balanced and single-ended inputs and outputs *à la* the Reference Two Mk II was too great for Lamm to undertake. And there's the lack of remote control -- "bad for sound" in Vladimir Lamm's words.

Whatever the case may be, these are two top-flight preamps that diverge in terms of their sonic traits as much as functionally. On the one hand there is the more linear-sounding and intimate L2, while on the other is the big and full sound of the Reference Two Mk II. The Lamm excels with smaller-scale music, jazz ensemble and chamber orchestra, while the ARC is at its best with Sousa or Rollins Band. No, neither is deficient with a particular kind of music, but each seems most at home with either large- or small-scale fare. Tonally, the L2 lacks the warmth of the Reference Two Mk II or its overt bass power, but its inherent naturalness is a far cry from a caricature of audiophile sound. Functionally and sonically, the Lamm L2 and ARC Reference Two Mk II are audio apples and oranges.

### **Conclusion**

Laden with features and producing a sonic tapestry that's big and involving, the Reference Two Mk II is a preamp worthy of its top status in Audio Research's line. I grew to admire its ability to draw me into the music in a way very different from my reference Lamm L2, but its remote control took no growing to like. I doubt there's an A/V system of any size or complexity that the Reference Two Mk II can't accommodate given its input and output options, and the preamp's pedigree

certainly makes it a solid, though expensive, purchase.

I found that pairing the Reference Two Mk II with the right amp a must (or perhaps it's the Lamms that need the careful matching), but ARC has you covered with the VTM200 as well as, I suspect, other models in the VT and Reference series. But once things are right with the Reference Two Mk II, they're very right.

...*Marc Mickelson*

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**Audio Research Reference Two Mk II Preamplifier**

**Price:** \$9995 USD.

**Warranty:** Three years parts and labor.

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