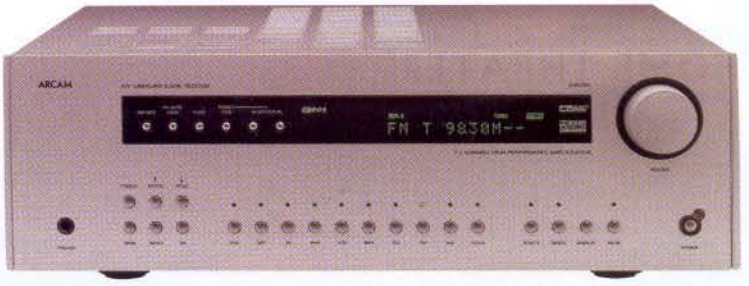
Arcam AVR300

Surround Sound Home Theatre Receiver



Peter Moncrieff

"The Answer"

Our fathers had a saying, which voiced a fond but unfulfilled wish: "What the world needs is a good ten-cent cigar." Today, in the world of high quality home theatre and surround sound, most of us have long had a similar fond wish, which has similarly remained unfulfilled. What the world has needed is a good $2,000 surround processor, one that really sounds good. Well, at long last, here it is.

"The Arcam AVR300 gets my vote as best product of the year."

Until now, if you wanted decent sound from a surround processor, you had to buy into the $5,000 high-end processor price bracket (and even that price does not guarantee good sound, as some of my past reviews attest). Until now, if your budget was constrained to the moderate $2,000 price bracket, you were guaranteed to get markedly compromised sonics. Surround processors are so complex internally, that many parts dollars must be spent just for achieving all the basic functions, leaving no extra money left over (in the manufacturing budget for a $2,000 surround processor) to spend on the better quality parts and circuitry needed to achieve good sound. Obviously, it would take very special engineering talent to deliver truly good sound in a $2,000 processor. So, until now, a truly good sounding $2,000 surround processor seemed as mythical and beyond reach as that fabled good ten-cent cigar.

The new Arcam AVR300 proves that Arcam has that very special engineering talent needed to finally create a $2,000 surround processor of high sonic quality. The AVR300 is literally a breakthrough product. It has broken through the logjam of countless moderately priced processors that are sonically compromised. This one achievement would be enough cause for headlines and hosannas. But there's more to the story. The AVR300 is the best sounding $2,000 surround processor I have ever tested. But the AVR300 is more. Much more. In fact, I have a new nickname for the AVR300.

The Arcam AVR300 is "The Answer." No matter what your desires and needs in surround audio electronics, the Arcam AVR300 is simply "The Answer."

SPECIFICATIONS

Audio Specifications
Signal/Noise Ratio (Analog Input): 100 dB unweighted
Signal/Noise Ratio (Digital Input): 100 dB unweighted
Frequency Response: 20 Hz - 20 kHz (±0.25db)
Power Rating: 120 watts for any 2 channels; 100 watts for all 7 channels

Inputs And Outputs
Video In: composite (7), S-video (7), component (3)
Video Out: composite (1), S-video (1), component (1)
Audio In: coaxial (3), optical (3), analog stereo (8), analog 7.1-channel (1)
Audio Out: coaxial (1), optical (1), analog stereo (3), analog 7.1-channel (1)

Features
Trigger Output: D.C. Voltage 12 volts ± 1 volt
Allowable Load 30 milliamp (minimum 400 Ohms)
Remote Inputs/Output: Signal Modulated 36 kHz Carrier
Coding: Philips RC-5

General
Size (WDH in Inches): 17 x 16.5 x 5.7
Power Consumption (Maximum): 1200va
Weight (net): 35.7 Pounds
Price: $1,999

Manufactured In The UK By:
Arcam
Pembroke Avenue
Waterbeach
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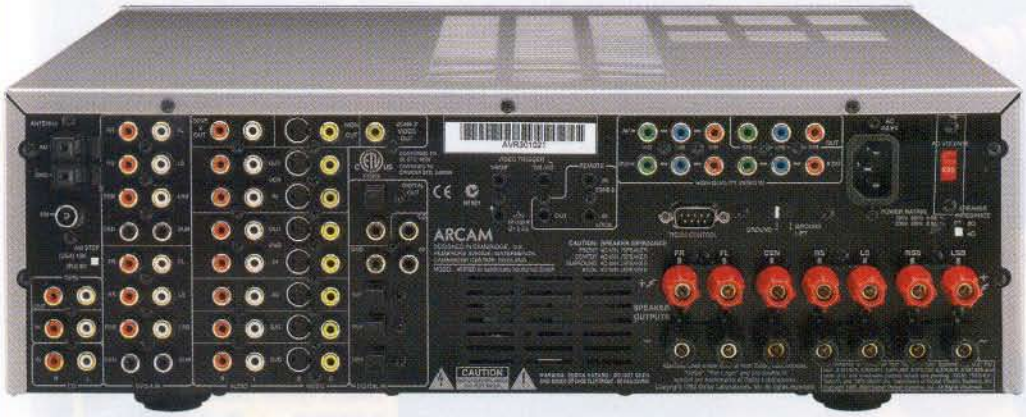
Are you on a budget but want the best sounding surround processor at a moderate price? The Arcam AVR300 is "The Answer." Is your budget unlimited, and you want the best sounding surround processor I've ever evaluated at any price? The Arcam AVR300 is still "The Answer." The $1,999 AVR300 is the best sounding surround processor I have ever tested, at any price, even sonically surpassing those other high-end processors selling for $5,000 to $12,000.

Do you want a surround processor with the latest sonically important surround enhancement features, such as Dolby® Pro Logic® IIx? The Arcam AVR300 is "The Answer." For playing high-resolution

CONNECTORS



audio discs with maximum fidelity, do you want a purist analog multichannel line section that is sonically competitive with the finest, most expensive separate units? The Arcam AVR300 is "The Answer."

Would you like an excellent sounding seven-channel, 100 watt-per-channel power amplifier, at a moderate price? The Arcam AVR300 is "The Answer." Would you like the extra cost of this power amplifier, on top of the $1,999 for the surround processor, to be really moderate, say zero bucks? The AVR300 is "The Answer." As long as Arcam is giving away the store to you, would you also like a tuner thrown in for free? The AVR300 is "The Answer."

Do you want the convenience of an all-in-one surround receiver, to build your surround system around? The AVR300 is "The Answer." Would you like it to also sound better than your neighbor's complex system composed of expensive high-end separates that cost him or her 20 times more than you paid? The AVR300 is "The Answer."

Are you a practical audiophile/videophile who wants your audio electronics unit to be a sturdy, adaptable workhorse that will sound great plugged into any system, of any price or complexity, and used for any task? The Arcam AVR300 is "The Answer." Or are you a purist perfectionist who wants your electronics to be responsive to tweaking, and be capable of giving you the ultimate in state-of-the-art sonics, so you can hear the sonic rewards of special purist setup tactics? Amazingly, the Arcam AVR300 is still "The Answer."

The Arcam AVR300 is a true jack-of-all-trades—and is master of all. It is a time tested adage that no-compromise, expensive high-end components can sonically outperform moderately priced components, whose performance must be compromised for the sake of parts cost and price. And it is a time tested adage that separate audio components can sonically outperform integrated receivers, whose performance must be compromised for the sake of convenient packaging within one chassis (and for the sake of cost as well). The Arcam AVR300 shatters these adages.

I work primarily with the very best sounding, no-compromise, and expensive separate audio components. My past sonic experiences, with moderately priced separates and certainly with the next step down integrated receivers, has taught me to be wary of expecting much in the way of true sonic fidelity from these units. So I was naturally pre-disposed against expecting too much from the AVR300. Good sonic value for the money, to be sure, since Arcam is deservedly already famous for this. But I was still expecting to find sonic compromises in the AVR300, compared to my absolute, perfectionist sonic standards for sonic fidelity. I insist on employing these absolute, perfectionist standards of sonic fidelity in judging all equipment, since that is the only scientifically correct protocol for evaluating the true sound of any product (the lower cost of a moderately priced product might make it good sonic value for the money, but it does not improve the product's actual sonic performance). Thus, I evaluated the AVR300 by inserting it (in various modes) into my perfectionist, high-end, high-resolution lab system, in order to gauge its absolute sonic quality.

I was shocked by what I heard. The Arcam AVR300's absolute sonic performance was as good as very expensive, perfectionist separate components. I tried the AVR300 in every mode, and put it through every wringer I could, and threw everything but the kitchen sink at it. I compared the AVR300 to the impossible rigors of a straight wire bypass, and I directly compared its various component sections to the best sounding expensive separate components. The AVR300 kept coming up a sonic winner. Overall, the whole AVR300 receiver pretty much equaled the sonic performance of the finest state-of-the-art separate components. And, when I analyzed individual sections of the AVR300 for sonic performance, they did just as well.

For example, when used just as a direct throughput analog line section (for playing multichannel high-resolution audio discs), the AVR300 actually sounded slightly better overall than perfectionist multichannel analog line sections, and yielded only slightly to the best perfectionist passive volume level controls. Then, when I compared the AVR300's built-in seven-channel power amplifier to the best separate multichannel power amplifiers, the AVR300 again offered equal overall sonic performance (with various subtle sonic pros and cons compared to the best separate power amplifiers), and yielded surprisingly little only to the very best perfectionist stereo and monoblock power amplifiers.

The Arcam AVR300 will improve the sound of virtually every system into which you might install it. It will surely be a sonic upgrade for every modestly budgeted system, which would typically rely on a single integrated surround receiver rather than separates. And the AVR300 will be equally at home in improving the sound of fancy perfectionist high-end systems. The AVR300 will do justice to the finest, most expensive associated components (disc player, cables, loudspeakers, etc.). Needless to say, the AVR300 is the new reference standard in surround processors, at any price, and is also the new reference standard in surround receivers.

The bottom line is simple. The Arcam AVR300 gives you state-of-the-art sound in audio electronics, which can sonically hold its own with the very best sounding separates, and the AVR300 will probably surpass the sound of the particular expensive high-end separates that your neighbor has chosen for his or her system.

In keeping with its sonic status as a reference standard surround processor suitable for perfectionist systems, the AVR300 can be flexibly configured and employed to perform the function of any component link in such a perfectionist system. There are

RCA audio output jacks for all eight channels (including back surrounds) from the surround processor portion of the AVR300, so it is easy to employ the AVR300 as just the best sounding surround processor I've ever evaluated (with alternative power amplifiers of your choice), or even as just a perfectionist analog multichannel line section (for playing high-resolution audio discs). You could then use the AVR300's built-in seven-channel power amplifier to drive auxiliary loudspeaker systems in another room.

There's ample cause for celebration and high praise when an audio company introduces any new component that achieves state-of-the-art sound. It's mind-boggling when an engineering team is able to achieve true state-of-the-art sound in the least likely format, an integrated receiver. And it's downright flabbergasting when this company and team are able to achieve this in a product that they can offer to you in the modest $2,000 price bracket. Arcam has scored an incredible coup with the AVR300.

The AVR300 has been eagerly anticipated since first announced by Arcam. But its actual arrival was delayed by six months, while the conscientious Arcam engineers, resisting commercial marketing pressures, tweaked the AVR300 design to sound even better, and added to the circuitry (beyond the originally budgeted concept) in order to improve the AVR300 yet further. This six-month delay was obviously well worth the wait, since the AVR300 as finally hatched, is a sonically peerless triumph.

Arcam's entire staff, from director to marketing to engineering, deserve further special praise for a unique corporate approach, which benefits you the consumer and also keeps Arcam in the forefront of the headlines. The Arcam staff seems to have an especially high esprit de corps, wherein they keep egging and encouraging one another on to greater and greater heights of achievement, always trying new ideas and never resting on their laurels. Consequently, Arcam is often the first manufacturer to introduce the newest features for better audio and video fidelity into their products.

Furthermore, Arcam is so conscientiously dedicated to always bringing you the latest engineering improvements, as soon as they are conceived, that they put these improvements into the very next applicable product, even if that product happens not to be the flagship model. As a result, junior models in the Arcam lineup sometimes temporarily outperform the senior models, until the engineering improvements can trickle up and be implemented into the next update of the senior model. Other manufacturers will tell you that this makes no commercial marketing sense, since in the view of their marketing departments, the senior model should always be the first to employ the newest innovations, after which these innovations can trickle down to the junior models, which means that these new innovations must wait to be introduced until the next feasible update scheduled for the senior model, and thereafter must wait even longer before they trickle down to the junior model. But Arcam seems technically driven rather than marketing driven, so they cannot wait idly by, for mere commercial marketing reasons, to bring you the newest engineering innovations. And in the long run that might be the smartest marketing tactic of all. It earns Arcam the reputation for being the first with the most, often at the moderate price points of junior models, which can reach and immediately benefit more consumers. And it earns Arcam the reputation for putting the interests of the caring consumer first.

For example, Arcam recently developed a new technology for reducing contaminating noise in digital circuitry, called Mask of Silence, wherein they judiciously employ ferrite to damp, filter, and shield digital noise, thereby improving both audio and video performance. Arcam put this new technology (plus a digital video output) into the junior DV79 disc player, which thereby outperformed the senior DV27A player, until the new senior DV29 player was introduced (also with the Mask of Silence technology), to become the rightful king of the hill. Likewise, the Mask of Silence technology is employed in the junior new AVR300 processor, and is a key ingredient in the AVR300 becoming the very best sounding surround processor I've ever evaluated regardless of price, whereas the older senior AV8 surround processor does not yet employ this Mask of Silence technology.

Detailed Analysis Of Intrinsic Sonic Quality

Following my usual procedure, I evaluated the AVR300 one section at a time, and in various operating modes, to get a complete picture of its performance. And, following my usual procedure, I evaluated the AVR300 against my strict absolute, perfectionist standards of sonic performance, using my high-resolution lab system to accurately (and mercilessly) reveal all the AVR300's strengths and weaknesses. Associated links included the very revealing Nordost Valhalla loudspeaker cables, VonGaylord Chinchilla interconnects, and a variety of loudspeakers. The audio sources included the McCormack UDP-1 universal disc player, which sets a stunning new standard for the sonic state-of-the-art in playing all disc formats, and Arcam's new DV-29 DVD player, which offers excellent sound (in addition to setting a stunning new standard for the state of the art in video quality).

First, I evaluate all processors in their direct mode, which is their best sounding mode, since the only elements in the signal path are the volume control and the analog output buffer stage. This is the mode you would use for playing high-resolution audio discs, since most of them are restricted to coming from your disc player in analog mode, and forbid your surround processor from encoding them into digital and doing any further signal manipulation or enhancement. Essentially, the surround processor is functioning as a multichannel analog line section in this mode.

How well did the AVR300 do on this cruel test? The sonic results were amazing, and were the first indication that this AVR300 was a sonically extraordinary product. In fact, the AVR300's overall sonic performance here was nearly perfect; surpassing all other surround processors I have tested, regardless of price.

After the above probing of a surround processor's sonic abilities as a multichannel analog line section, I moved on to evaluating its sonic performance via its digital input. This is the mode you would want to employ for most input signals that are digitizable, which would include discs with compressed, data-reduced digital audio (film soundtracks), and perhaps also stereo CDs. The advantage of using the digital input is that the AVR300's signal processing capabilities (all of which are accomplished digitally) become available to you, whereas with the multichannel analog input you are constrained to the direct mode (evaluated above), which does not allow any conversion to digital (for fear of piracy) and hence does not allow any digital processing options.

How did the AVR300 sonically perform on this digital input test? In a word, stunningly. So stunningly in fact that the AVR300 is the very first surround processor I've found that is sonically competitive with the very finest, most expensive separate components that you might find in a high-end perfectionist system (such as premium outboard D/A converters, or the D/A converters found in premium disc players). Indeed, the Arcam AVR300's sonic performance here, via its digital input, can be so stunning that, when I directly compared the sound via the AVR300's analog direct input to the sound via its digital input, the sound via the digital input was even better, in some key sonic aspects (such as transparency).

The AVR300's superb intrinsic sound via

its digital input is great news, since most of the program material fed into a surround system can be (or even must be) brought into a processor via the digital input. It's especially great news if you, like me, have a treasured library of music on stereo CD. The AVR300 can give you, from your treasured library of music on two-channel CDs, including recordings half a century old, a sound that can have better fidelity and a better surround field, than many of today's true surround recordings.

The next step in my standard processor evaluation procedure is to add yet another stage into the signal path, this time the processor's built-in A/D converter that is used to convert incoming analog signals to digital, for processing or surround enhancement. You would be employing this mode for doing surround processing on incoming two-channel signals from external analog sources.

How did the AVR300 sonically fare in this mode? Excellently, and again better than any other processor I have ever evaluated, regardless of price.

To sum up the AVR300's performance thus far as a surround processor, any and every signal path through the surround processor (analog direct, digital in, or analog non-direct) is intrinsically capable of superb sonic fidelity, better than I have heard from any other processor at any price, and even competitive with the finest perfectionist separate components.

The next evaluative step was obviously to add the AVR300's built-in seven-channel power amplifier section into the signal path, to probe its sonic performance. How did this power amplifier sound? Once again, I was pleasantly shocked and amazed at the AVR300's performance. It excels at all the important sonic virtues, including transparency, clean purity, wide bandwidth with easy coverage of both spectral extremes, an open and airy sound, and all aspects of spatial imaging.

The AVR300's power amplifier also has an amazing amount of dynamic punch (including very good bass impact and definition), amazing for a 100 watt-per-channel amplifier, and especially amazing for a power amplifier that squeezes seven of these 100-watt channels within a compact chassis that also houses a tuner and a complete surround processor that sets new sonic standards (not to mention the modest price of the whole package). Even though the power rating is merely 100 watts per channel, I found that I could play the amplifier quite loudly, and the sound remained wonderfully clear and pure, without the congestion that many other power amplifiers evince at high volume levels. This was especially rewarding with complex orchestral music, since the AVR300's superb clarity, purity, and absence of congestion, even at sustained high volume levels on complex music, let me hear into the orchestral ensemble, and let me hear the composer's complex orchestrations, better than most other separate high-end multichannel power amplifiers, even those selling for many times the $1999 price that gets you not only the AVR300's on-board power amplifier but also the complete receiver.

Surround Enhancement For Two-Channel Material

The AVR300 boasts a rich and useful complement of surround processing and enhancement modes, and you can conveniently select among the available appropriate choices (for each different type of program source) by simply repeatedly pushing the Mode button on the remote (or the front panel).

The AVR300 provides a choice among the various Dolby modes (Pro Logic®, Pro Logic II, the new Pro Logic IIx, Dolby Digital 5.1, Dolby Digital Surround EX™, and the new Dolby Digital Pro Logic IIx), and DTS modes (including 5.1, ES 6.1, and the Neo6 surround enhancement modes). One feature the AVR300 does omit is THX® processing. I particularly enjoyed the spatial imaging of the THX Surround EX™ mode and some other THX options when testing Arcam's senior AV8 processor, but frankly I don't miss them now in the AVR300, because the AVR300 is so superb at portraying and re-creating spatial imaging, especially in modes such as the new Dolby Pro Logic IIx and DTS: Neo6, as discussed below. Incorporating THX into the AVR300 would have forced the AVR300 to be more expensive (due in part to THX licensing and certification fees), or alternatively, if the price was to be held constant, would have forced Arcam to compromise the AVR300's amazing sonic quality by deleting some sonically important circuit aspects. So I think that Arcam made the right choice here.

Now let's tackle the important bottom line question: just how good does the AVR300 sound in its various signal-processing modes?

Let's start simply, with the playing of stereo music recordings. Here your best sounding choices for surround enhancement are DTS: Neo6 Music and Dolby Pro Logic IIx Music.

Neo6 has a sonic advantage for well-miked stereo material, in that it better preserves the sonic fidelity and spatial imaging of the stage up front that was encoded into the recording. The AVR300 is then superb, in this Neo6 Music mode, at extracting ambience from the recording and feeding it to all other loudspeakers, thereby synthesizing or re-creating a richly believable sense of being in the large hall, with the musical performers all up front. Indeed, the AVR300 with its superb transparency and spatial imaging is so extraordinary in this mode that, as mentioned above, 1955 two channel recordings can sound more convincing, at putting you in the hall with the music, than many of today's true surround multichannel recordings do.

On the other hand, Dolby Pro Logic IIx is helpful for stereo material that has been too closely miked. The overall Dolby portrayal of the alternative venue is more spacious, richer in ambience, and more diffuse, with less specific localization. This presents a larger spatial image of the stage than Neo6 does, and richer hall ambience all around you. You might enjoy this spacious, rich enhancement effect on all recordings. I prefer the accurate stage image of Neo6, for playing recordings wherein the stage space has been well recorded. But many recordings are too closely miked, and thereby portray a stage that sounds small, confined, narrow, and shallow. For these recordings Dolby Pro Logic IIx is very effective at enlarging the portrayed stage space to realistic proportions, and at richly enhancing the too dry hall ambience contained in the recording.

I found that I obtained the best surround soundfield enhancement from Neo6 by turning up the side/rear surrounds 8 dB in level and 38 ms in delay, and the back surrounds up 9 dB in level and 45 ms in delay, relative to the standard calibration settings (equal level and equidistant delay from all loudspeakers). This large level boost is necessary to get enough surround ambience information out of Neo6 for the surround loudspeakers. And this long added delay provides two benefits. It prevents the boosted level of the surrounds from being heard as distracting direct sounds from the rear, thanks to the Haas effect. And it creates a realistic halo of hall ambience to your rear, which accurately simulates the hall reverb from your back side that you'd hear live from an excellent seat located 20 feet forward from the hall's back wall.

The AVR300's sonic performance is so superb that it makes the most out of these two surround enhancement modes, more than any other processor I've ever evaluated regardless of price. I previously praised Arcam for making products that open a new frontier in surround sound, mastering the rich and accurate reproduction of space itself. And I discussed in previous reviews

the crucial importance of reproducing space, in order to suspend your disbelief and aurally transport you out of your small listening room and convincingly immerse you in an alternative large venue. The AVR300 continues this Arcam tradition of mastering space, and indeed takes it to new heights. The AVR300 is so superlative in transparency, and clean purity, and articulation, and coherence, that it clearly and accurately reveals very subtle sonic cues in the recording, cues about the music itself and also about the space around the music, including the entire space of the recording venue. Because the AVR300 is so superb at reproducing and revealing these subtle sonic cues about space itself from each recording, the AVR300 gives these surround enhancement-processing modes more information to work with. And that in turn means that these modes, when heard through the AVR300, give you a far richer and more believable sense of surrounding space, even from mere two channel recordings.

The AVR300, like all other processors, also includes some other obligatory two-channel signal processing modes, which are less useful, and which also don't sound as good as they make their way through the DSP that does the signal enhancement processing. For example, the simple Dolby PL (Pro Logic) mode implements the old, original Dolby Pro Logic processing, and is included just for playing legacy recordings. Its sound is dull, and the Arcam manual even specifically warns you that this mode is sonically inferior. Another mode that gets processed through the DSP, the straight Stereo mode, is likewise sonically disappointing, sounding artificially midrangy, hard, clogged, and spatially flat and two-dimensional. Here Arcam is at the mercy of the DSP manufacturer (Crystal), who has pre-programmed these special processing modes into the DSP, and Crystal has evidently done something surprisingly wrong, processing this seemingly simple, straight mode through the DSP (even though they did a wonderful job with the great sounding DTS: Neo6 and Dolby Pro Logic IIx enhancement processing modes, which of course involve far more complex signal manipulations within the DSP). Fortunately, you'll never want to bother using this Stereo mode through the DSP anyway, since, for playing two-channel material in straight stereo, you have the far better sounding (indeed spectacular) analog input Direct mode available in the AVR300.

Surround Processing And Enhancement For Multichannel Material

Next, we turn to the AVR300's processing modes for digitally input multichannel program material, including of course music videos and film soundtracks on DVD. The AVR300 features the usual array of processing modes seen in today's surround processors, including Dolby Digital 5.1, Dolby Digital Surround EX, DTS Digital Surround™ 5.1, and ES 6.1 (matrix and discrete). Then, the AVR300 also includes the new processing mode called Dolby Digital Pro Logic IIx. Note that these Dolby Digital processing modes operate upon a discrete 5.1 channel digital signal, whereas the Pro Logic IIx

Music and Movie modes discussed above operate upon a two-channel signal (which can be input via analog or digital routes).

How well does the AVR300 perform in its various multichannel-processing modes? As you might expect from the AVR300's superlative prowess in all the other modes evaluated above, it also does a superb job here, in all the other usual (Dolby and DTS) processing modes for digitally input multichannel sources, portraying space and subtle details (of music, dialogue, and sound effects) better than any other surround processor or receiver I've ever evaluated, regardless of price. That's extremely high praise, and praise enough. But you ain't heard nothing yet, for I am reserving the bulk of my discussion here for the new processing mode implemented in the AVR300 Dolby Digital Pro Logic IIx.

Dolby Digital Pro Logic IIx mode, in the AVR300, brings the same crucial types of sonic improvement over EX or ES, that the EX or ES modes brought over straight 5.1. But it does so to a hugely greater degree. On a variety of program material (most of it not even EX encoded) I directly compared, via the AVR300, straight Dolby Digital 5.1 to Dolby Digital Surround EX and to Dolby Digital Pro Logic IIx (to keep the comparison within the Dolby family). The sonic improvements (especially spatially) of EX over straight 5.1 were large and very important. But the further sonic improvements of Pro Logic IIx over EX were huge, stupendous, name your adjective. Once you have heard the AVR300 playing a video soundtrack in Dolby Digital Pro Logic IIx mode, you can't go back to anything less. It brings a new, much higher level of reality to surround sound that makes other modes pale in comparison. The AVR300 playing in Dolby Digital Pro Logic IIx mode is simply the greatest thing since that proverbial sliced bread, a breakthrough revelation in home theatre surround sound.

What are the specific sonic improvements of Dolby Digital Pro Logic IIx over Surround EX, as heard in the AVR300? First, consider the space portrayed in back of you. Pro Logic IIx gives it a cogent, coherent specificity and reality that goes far beyond Surround EX. Dolby Digital Surround EX was an important advance over straight 5.1, since it at least portrayed some sense of the large recording venue's size behind you, thereby immersing you in that space rather than leaving you merely peeking in the doorway, as straight 5.1 did. But, as good as and as important as Surround EX was, when something better comes along the human ear/brain is very quick to hear the deficiencies of the older system, especially in my direct comparison as afforded by the AVR300, which is so superbly revealing of spatial information that it highlights the sonic improvements of Pro Logic IIx, probably more than other forthcoming Pro Logic IIx units will, and thereby also discloses the sonic shortcomings of Surround EX in comparison.

With Dolby Digital Surround EX, the information you receive from your back merely tells you that there's some vaguely spacious, amorphous space in back of you. In contrast, Dolby Digital Pro Logic IIx in the AVR300 defines the boundaries and the acoustics of that portrayed space in back of you. For the first time, you can hear where the walls are of that space, how far away they are, and how the various sounds from the stage up front are reflecting off that back wall. This specific information, subconsciously decoded by the human ear/brain, makes the whole space in back of you sound far more real, and makes the sense of being truly immersed in that alternative space far more persuasive and believable.

The whole point, and the whole magical experience of surround sound, is to persuade your subconscious to suspend disbelief. I tried one soundtrack after another, one scene and setting after another, and the sonic results were always the same. The sense of being transported to and immersed in the real acoustic of the alternative recorded venue is so persuasive from the AVR300 via Dolby Digital Pro Logic IIx, that every time I switched back to Surround EX the whole surround space, and the whole surround experience, was like a mere caricature of the real thing as I experienced it via Pro Logic IIx (and straight Dolby 5.1 without the back surrounds sounded like a weak joke). The moral is simple. Unless you are experiencing multichannel videos via Dolby Digital Pro Logic IIx on the Arcam AVR300, you're just not cooking with gas. That's why you'll want to buy the AVR300, even if you only will use it as a Dolby Digital Pro Logic IIx processor for the rest of your system.

All these dramatic sonic benefits from the new Dolby Digital Pro Logic IIx crucially depend on the host processor (and power amplifier) being superbly transparent, pure, and spatially revealing. If you were to buy Pro Logic IIx implemented in a host processor that was less than superb in these crucial aspects, then Pro Logic IIx could not fully achieve the spatial magic I heard above through the AVR300, and all the above described sonic benefits, since some of the subtle spatial information needed to create the Pro Logic IIx magic would be obscured, distorted, or lost by a less than superb host processor.

That's why Dolby Digital Pro Logic IIx and the Arcam AVR300 are a marriage made in heaven. Both are sonic breakthroughs, achieving new levels of spatial reality not heard before. The Arcam AVR300 is superb in the sonic strengths needed here: transparency and clean purity, and, perhaps most importantly, the vivid portrayal of space itself, a particular Arcam skill already noted in my review of Arcam's AV8 processor. The AVR300 allows the breakthrough spatial sonics of the new Pro Logic IIx mode to sound their glorious best, and may well sonically surpass other host processors that introduce Pro Logic IIx in the near future.

The only thing that will probably surpass today's Dolby Digital Pro Logic IIx through the AVR300 is in the future, when blue-laser optical discs make possible eight channels (or more) that are truly discrete, uncompressed linear PCM. Dolby and DTS have already announced new processing modes for multiple discrete channels from future blue-laser DVDs, and I expect that Arcam will again be first with the most for handling these future discrete soundtracks. Even then, in the future, when you'll still want to play soundtracks from legacy red-laser DVDs, Dolby Digital Pro Logic IIx as implemented now in the AVR300 will probably continue to be the option that brings you the most magic.

With its superb transparency and portrayal of space, the Arcam AVR300 is a unique space machine. Using the AVR300 in the new Dolby Digital Pro Logic IIx mode (with seven loudspeakers), for playing all your video soundtracks, is like taking a joyride in a space machine. Likewise, using the AVR300 in DTS: Neo6 Music mode (or Pro Logic IIx Music mode), for playing your entire two-channel music library, is like getting a ticket to the original hall.

Incidentally, the AVR300's built-in tuner is serviceable (as is the case with the tuners built into most other receivers), and has some useful special features. But its basic sonic quality is not up to the high-end standards set by the rest of the AVR300. Specifically, the tuner section's tonal balance is too lean (warmth is not rich enough), and the midrange and treble frequencies have too much solid-state hardness. So, if you're a serious broadcast listener, I would suggest getting a separate dedicated tuner. On the plus side, the AVR300 is superb at enriching all stereo broadcasts with its surround enhancement modes, just as it does for two-channel music on CD (as discussed above), and indeed all two-channel sources. Once again, my favorite AVR300 surround enhancement mode for stereo material is

DTS: Neo6 Music mode (with the levels and delays set high on all four surrounds), and this yields a wonderful experience from FM stereo broadcasts, whether from the built-in tuner or from an external tuner.

Conclusion

The category of A/V receiver is generally not taken seriously, and is looked down upon with disdain, as a product of convenience for everyman, but not for the serious audiophile or videophile. In fact, Hi-Fi News, in their just published year-end awards for best products of the year in many varied categories, did not even deign to include a category for A/V receivers. Most of the A/V receivers on the market do indeed justify this disdain and dismissal.

But the Arcam AVR300 shatters this preconception. The AVR300 is easily the world's best A/V receiver I've ever evaluated, and far better than other A/V receivers. And it is also far more than that. The Arcam AVR300 utterly and completely transcends the label and category of A/V receiver. It also leapfrogs the category of A/V integrated amplifiers. Instead, the Arcam AVR300 takes its place alongside the finest, most expensive high-end A/V separates, and deserves to be considered with them as its true competition. And even here, in this exalted company, the AVR300 still usually carries off the gold medal for best sonic performance.

Compared against the world's best, most expensive separate A/V surround processors, the Arcam AVR300 is the best sounding I've ever evaluated. In addition, the AVR300's implementation of the new Dolby Digital Pro Logic IIx for video soundtracks gives it an additional leg up on all the high-end processor competition. Compared against the world's best, most expensive multichannel analog line sections, the AVR300 (in its comparable analog Direct mode) is one of the two best sounding overall, and places first for the all-important sonic aspect of spatial imaging. Compared against the world's best sounding multichannel separate power amplifiers, the AVR300 is sonically their equal overall, and is far and away the best sounding I've ever evaluated when compared to all such basic power amplifiers selling for anywhere near $1,999 (which in the case of the competition gets you only a basic power amplifier, but in the case of the AVR300 gets you a whole receiver tossed into the bargain). Thus, the Arcam AVR300 is far more than the world's best A/V receiver I've ever evaluated, and far more than a shatterer of the A/V receiver category myth.

Also, at its modest price of $1,999, the Arcam AVR300 is more than a bargain. It is actually five bargains, for the price of one. Even if you were only seeking the world's best sounding multichannel basic power amplifier I've ever evaluated anywhere near $1,999, the AVR300 would be your best choice and best bargain. Even if you were only seeking the world's best sounding surround processor I've ever evaluated regardless of price, the AVR300 would be your best choice, and an incredible bargain at $1,999. Even if you were only seeking the world's best sounding multichannel analog line section, to add to your high-end system of separates, the AVR300 would be one of the two best sounding choices, and an incredible bargain at $1,999. Even if you were only seeking the world's best sounding multichannel D/A converter, to add to your high-end system of perfectionist separates (using your disc player just as a transport), the AVR300 would be the best sounding choice I've ever evaluated, and an incredible bargain at $1,999. And even if you were seeking only to add, to your high-end system of separates, Dolby Digital Pro Logic IIx, the milestone breakthrough in surround for video soundtracks, implemented in electronics whose superb spatial imaging can make the most of Pro Logic IIx's virtues, the AVR300 would be your best choice, and a bargain way to add Pro Logic IIx for just $1,999. Of course, the Arcam AVR300 is actually all five bargains, all rolled into one unit, which gives you all five perfectionist high-end components for the ridiculous high-end bargain price of $1,999, plus a tuner, plus the convenience of a receiver.

The Arcam AVR300 transcends categorization. It is an A/V receiver, but it is also so much more. The Arcam AVR300 gets my vote as best product of the year. Not just in one category. Best product of the year, period. So, if you want the best product of the year in my judgment, once again the Arcam AVR300 is "The Answer." ■