EQUIPMENT REVIEW

Arcam SR250 stereo receiver by Alan Sircom



udiophiles have a somewhat justified reputation for being conservative in nature. This can be a good thing: we are the people who kept vinyl alive before it was fashionable, and we are the people who are sparking a revival in open reel tape even though it's been - at most - a

niche within a niche for decades. But this has its darker side, such as our almost pathological rejection of all things 'home cinema'. The Arcam SR250 challenges this prejudice head on, as it's a two-channel AV receiver that is - from an audiophile perspective - bloody good! Perhaps still worse for the prejudice part, it's bloody good in part because of its AV receiver aspects.

There is a touch of 'huh?' about the rationale behind the SR250, both from the traditional two-channel and the AV world, as it seemingly commits sins of commission for the former and omission in the latter. The two-channel >



world (erroneously) sees no need for HDMI connectors, Dirac Live room correction, or anything to do with Dolby or DTS, while the AV world sees this as having too few channels to be worth bothering with. While it's hard to argue the latter with someone who has already installed a full Dolby Atmos speaker system and demands seven channels of amplification, anything more than a surface reading of the specification sheet shows up a really impressive design that runs roughshod over the rules of the Great Audio Divide.

All of which means the SR250 is a 2x90W Class G AV receiver designed for stereo systems, although it can be driven as a 2.1 or even 2.2 channel system. It supports both Dolby Audio and DTS HD Master Audio (these are not as pointless as it might seem to the stereo-only audiophile, as both are useful for accurately downmixing multichannel-encoded audio into two-channels in the manner and resolution intended at the engineer's mixing desk). It also features Spotify Connect, so Spotify Premium users can send their music selections direct to the SR250 so long as they are on the same Wi-Fi

network. It has both an FM and DAB radio tuner as standard, or you can drive internet radio through the company's own vTuner service portal, and this can be controlled from the supplied remote.

Class G might be a new amplifier design to many, although is notionally similar to the Class H designs used in PA systems. The idea is to retain the properties of a Class A design in sonic terms, but with good, solid Class AB design power when needed, without the inherent heat issues of higher-power Class A designs or the crossover distortion of Class AB. This works by having multiple power supplies feeding the output stage; one set for those subtle 'first watt' moments, and a more muscular supply set for the heavy lifting duties. This is a complex, and therefore more expensive, circuit to design and implement, but the result is the clarity and finesse of Class A with the dynamic power and scale of Class AB, all in a package that runs efficiently.

As discussed earlier, there are seven HDMI audio/video inputs and three outputs (two standard outputs and one for a second zone), alongside six RCA phono stereo analogue inputs, four coaxial and two optical digital audio connectors, an Ethernet RH45 socket, an input for FM/DAB radio and, perhaps somewhat perversely, a USB A socket for use with USB drives and for software updates, but no USB B socket for a direct computer connection. There are also the usual RS232 and trigger connections for custom install use (with downloadable Control4 and Crestron modules), and a 6V output for those wishing to power one of Arcam's rSeries products direct from the SR250 (a phono stage is the obvious choice, here).

Ethernet is the preferred pathway for stored music it seems, and Arcam makes an iOS app to control both the UPnP functionality and basic controls of the SR250. There is no matching Android app, unfortunately, which is a

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shame because the app works so well, the amp seems almost hobbled without it. For such a complex amplifier, its control surfaces and display are relatively minimalist, and one could be forgiven for thinking this just a bulky stereo integrated amplifier.

The big feather in the SR250's cap is Dirac Live. This is a suite of room correction programs designed to measure, analyse, and compensate for your room's idiosyncrasies. There's a microphone supplied with the SR250 (although you'd be wise to obtain a microphone stand) and the program is downloaded to your Mac or PC. You take a number of measurements in preset locations around the listening position (Arcam recommends using the 'sofa' configuration rather than 'chair'), the program then sends the results to Dirac, which analyses the resulting test tones to create a config file for the SR250.

This creates both a degree of compensation for the sub-200Hz region, carefully worked phase linearity across the frequency range, and a gentle tailoring of the frequency response to bring the loudspeaker in line with a notionally perfect model. There are three ways to think of this kind of equalisation; with knee-jerk horror at the inclusion of DSP (the pivotal word here is 'jerk'), as a kind of Band-Aid to repair all kinds of installation 'nasties', and the right way: as a way of making a well-integrated and wellinstalled system sound even better. Set the system up with all the precision needed to make it sound as good as it can first, then run Dirac to bring out the last degree of nuance. Better still, hand this over to a professional installer who has both the tools (a good measuring microphone on a mic stand) and the skills to implement it properly. This is a mantra said throughout audio, but Dirac Live

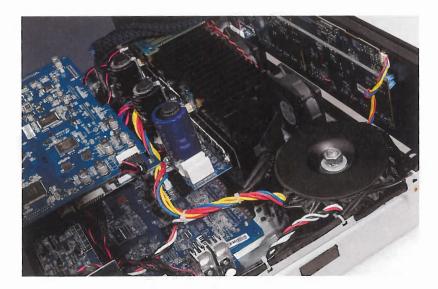
requires more 'laptopping' than most home audio, and a good dealer with a Black Belt in custom install will sail through what might cause you some bitten fingernails. Arcam has a very useful 15-minute long YouTube video on the reason behind Dirac and how to implement it. If this seems like it is too complex for you to parse, it's installer time. Yes, of course, you can use the SR250 without implementing Dirac Live, but why would you? It's like buying an airline ticket and then taking the train.

Perhaps more than most next-gen audio devices, the SR250's learning curve is front-loaded. The complexity all hits you in the early stages of installation, and once completed, it then behaves like any amplifier, just with app support and UPnP. It's very much 'fit and forget', even if the fit part demands a fairly steep climb.

There are good points and odd points to the overall performance. The lack of Wi-Fi, the lack of provision for USB B and especially capping the UPnP Ethernet signals to 24bit, 48kHz are all things that might prove problematic to some audio enthusiasts, but the provision for Spotify Connect and the Dirac option changes that round entirely. The overall balance of positives and negatives tilts very much in Arcam's favour with the SR250.

Coming to terms with the sound of the SR250 is a slightly odd experience, especially when fully configured. It's absolutely unlike what you might expect, especially if you are unable to quite switch off the "it's a home cinema amp" mode in your head. Because, if you think home cinema and equate that to booming bass and splashy highs, the SR250 does precisely none of that. It's clean, but not bright, incredibly detailed, and possessed of that kind of erudite refinement that normally comes with valve amplification. But it also has the control and dynamic drive that is normally associated with Class AB power houses. The Dirac'd phase correction and frequency curve do work wonders, although I suspect the phase correction is more useful with loudspeakers that are not Wilson Duettes. The Wilson speaker retained the energy and drive it does so well, but it also came with more of a 'well mannered' frequency extension rather than any kind of edginess or brashness that one sometimes gets when hooking a pair of loudspeakers to an amp that is almost one-tenth the price. This doesn't sound artificial, like there has been a 'toob-filter' applied to the sound, more that the SR250 makes the loudspeakers sound a bit more like they should be sounding.

One of the reasons why this is slightly weird sounding at first is what you hear is often the sound of the limitations of other designs. The bass isn't overt, and the treble isn't overemphasised; these aspects of the frequency response are just honest. And that at first can make it seem to be almost dull sounding and quiet sounding. And it stays sounding quiet until you try to talk over the system and you realise just how much it holds in reserve. This is a remarkably honest, extraordinarily powerful amplifier (far more than the 90W might imply), which is quietly ticking over when other amplifiers are fully revved up.



That's not to say it's somehow laid back. That brief moment of 'dull' sound quickly gives way to a more honest appraisal of the sound of the loudspeakers. You realise the amplifier is just incredibly honest and undistorted, in a way that highlights just how rare those claims really are at this price level. Yes, if you go for cost no object audio and look to the biggest and best, then honest and undistorted are fairly achievable goals. But this isn't a Constellation Audio product and isn't priced at Constellation Audio levels, and yet a well set-up SR250 gets on the same page as the big hitters with even bigger price tags.

The usual indicators work wonders here. Piano and female vocal are perfect indicators of a system's overall fitness, and the Arcam gets a clean bill of health. Playing 'Take the Night Off' by Laura Marling [*Once I Was An Eagle*, Virgin] is a perfect example of what the Arcam SR250 does so well to music, as her voice is remarkably pure in tone (like a modern Joni Mitchell) and so easy to get wrong. Here, she simply soars above the acoustic guitar tones, seemingly unconstrained by the electronics in the audio chain. It's like listening to the live event. Once again, these are commonplace suggestions when dealing with very high-end audio, but rare at anything like this level.

Although we've concentrated on the naturalness and purity of the sound, the effortlessness also applies to things a little more raunchy, whether grungy rock chords or full-tilt orchestra swells. Ultmately, the amplifier might not have quite the metronomic accuracy of some of the true keepers of the beat, but it's no slouch in this aspect either. Playing 'April Skies' from The Jesus and Mary Chain's epic *Darklands* album [Blanco y Negro] highlights this perfectly; the music had the power and scale required to deliver the almost wall of noise created on this 30 year old indie classic, but only had some of the shoegazy rhythmic drive that makes you shuffle awkwardly from foot to foot. On balance, though, I'd take the clarity and dynamic range.

The Arcam SR250 is a really good stereo amplifier, and not just at the price. If you can get past the inherent fear of home theatre intrinsic to many audiophiles, and are prepared to delve into Dirac, this is perhaps the best \pounds 25,000 amp you can get for \pounds 2,500. Recommended!

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TECHNICAL SPECIFICATIONS

Type: 2.1 channel stereo AC Receiver Continuous power output, per channel, 8Ω: 2 channels driven, 20Hz – 20kHz, <0.02% THD – 90W 2 channels driven, 1kHz, 0.2% THD – 120W Residual noise & hum (A-wtd) –<0.15mV

Audio Performance (Stereo line inputs): Signal/noise ratio (A-wtd, stereo direct) - 110dB Frequency response - 20Hz-20kHz ± 0.2dB Video Inputs: 7x HDMI (6x HDMI2.0a, HDCP2.2, 1x MHL compatible) Video Outputs: HDMI - 2x Z1 (out1 ARC, HDMI2.0a, HDCP2.2, out 2 HDMI2.0a, HDCP2.2), 1x Z2 (HDMI2.0a, HDCP2.2) Audio Inputs: 7x HDMI, 4x Coax S/PDIF, 2x Toslink, 6x RCA Phono, 3.5mm aux, USB input, Ethernet Client, Internet Radio, ARC (from display) Audio Outputs : 2.1 Pre-amp output -4x RCA Phono Zone 2 output - RCA Phono Radio Tuner : FM / DAB / DAB+ (in appropriate markets) General: 2x 12V Trigger x2, 2x IR in, 1x **6V rSeries PSU** Dimensions (W×D×H): 433 × 425 × 171mm Weight: 15.1kg

Price: £2,500

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