



ON THE DVD

**WHAT IS IT?**

A calibrated measurement microphone and software package designed to correct room response and loudspeaker anomalies in the studio control room.

**CONTACT**

Who: IK Multimedia  
 Tel: +44 (0)1223 234414  
 Web: [ikmultimedia.com](http://ikmultimedia.com)

**HIGHLIGHTS**

- 1 Easy to use.
- 2 It works on a range of different systems.
- 3 The included measurement mic is also a decent recording mic.



# IK Multimedia ARC | £469

IK are a familiar name in the plug-in world, but what are they doing producing a ‘room correction’ system?  
**Bruce Aisher** looks at this hardware/software solution

**T**he makers of the ARC, IK Multimedia are well-know and respected for their range of instrument and effect plug-ins

such as Amplitude and SampleTank, so it came as some surprise when they announced the move into acoustic processing, albeit of a plug-in based nature. But here it is in the flesh.

This is, in fact, a technology licensed from Audyssey, a Los Angeles-based company that was setup to market technology first developed in the Immersive Audio Laboratory at the University of Southern California. The chief engineer at Audyssey is Tomlinson Holman who has won an Academy Award for his work in developing the THX Sound System. Their dominant

focus is on the study and correction of sound reproduction systems in different acoustic environments, with their technology predominantly licensed for use in home theatre systems. The IK ARC system however, is intended for use in correcting room and monitor-based anomalies in the studio.

The ARC system is intended to deliver this advanced processing to DAW-based studios and combines a specially calibrated microphone with a standalone software analysis package for capturing the room characteristics and calculating the correction data.

The included software guides the user easily through the measurement procedure utilising at least twelve separate readings. This information is

then fed to a plug-in using Audyssey MultEQ technology, a linear phase design, that corrects frequency and phase response, something that traditional analogue EQ cannot do without problematic side-effects.

**In The Box**

Unlike IK’s software products, the first thing you notice on opening the ARC packaging is the black plastic box containing an interesting-looking silver microphone that looks suspiciously similar to well regarded high-end mic. It’s labelled as being made in China, so as we have come to expect in recent years, looks can be deceiving.

In the box you will also find a CD with the all-important software for

putting the microphone to work, a slim manual and registration card with the serial number required for authorising the package.

I began with the mix position in my own studio. It is a medium-sized and moderately well treated recording and mixing space with Adam P-33A monitors. Having taken about 18 readings with the mic I fired-up Cubase, placed the ARC plug-in across the main monitor path and loaded the generated correction file.

I immediately noticed the rather lumpy looking low frequency plot of my room response. This didn't come as much surprise, as I had been experimenting with various bass treatments to tame such problems.

What was surprising was how different the mix sounded with the ARC plug-in enabled. My initial impression was of a mix lacking warmth and sufficient bass, so I tweaked the levels of individual mix elements and adjusted the overall compression until I was happy with the sound. Having done this I then bypassed the ARC.

What I then heard was a slightly

### The ARC's Microphone

While the microphone that comes with the ARC package is, first and foremost, a measurement microphone, even the manual states that it can be put to work in a normal studio role. With this in mind, and given the opportunity to test it on a piano alongside a wide selection of other mics, I leapt at the chance to see how it fared.

The mic itself exhibits an omni-directional pickup pattern, meaning that it will record sound sources

in all directions. Placing the mic inside the piano, above the hammers and in the middle of the keyboard range produced a surprisingly warm and

pleasant tone. In fact it came out better than most of the other microphones. I even put the piano recordings to a panel of eight other people and they all agreed that it sounded better than many of the others on offer.

The only problem for some recording situations may be the omni response leading to a high level of room ambience being captured alongside the source, but alongside it's main role, the microphone can't be faulted.



balanced. So, despite early misgivings, the system proved itself.

Finally, I tested the system in a large square untreated room with a central listening position. The speakers were small and very widely-spaced Genelecs. Using a range of microphones (including a fantastic Soundfield model)

improving the studio listening environment is a bad thing. It's also worth remembering that an overly reverberant and reflective environment will still sound as such, and that a degree of acoustic treatment should be the first thing to look at, though the ARC system uses a linear phase EQ

design, which avoids many of the pitfalls of traditional monitor EQing techniques.

This brings us to who the ARC is predominantly aimed. At nearly

£500, it isn't cheap, and many people might be better off putting the money toward better monitors and some acoustic treatment. But if you have decent monitors and a room that is beyond further cost-effective help, then the ARC is definitely worth looking at.

It takes time to get used to the 'improved' sound it produces but if you learn to trust it you'll produce portable mixes that do sound good. If only my car could host plug-ins! **FM**

## The ARC reduced the high level of boominess in the room and presented much better imaging

boomy mix with a squashed stereo image. Was this really what I had been mixing against?

Obviously the real test comes when mixes are transferred to other systems. With this in mind, I took the plunge and used ARC on a commercial production and mixing session and the resulting mix sounded good across a range of systems. I sent the track to a number of 3rd-party 'ears' and they all agreed that the mix was dynamic and well

on a Bechstein concert grand piano, the ARC reduced the high level of boominess in the room and presented much better imaging. However, it clearly did nothing about relatively long reverberation time and highly audible echoes in the room.

### Conclusion

The ARC is a very interesting system. In fact it goes against the generally correct philosophy that EQing as a way of

### SPECS

**PC:** XP or Vista with a minimum 1GHz Pentium or 1.33GHz Athlon XP processor and 512MB of RAM

**Mac:** Power PC and Intel Macs (minimum 866MHz G4 Power PC) running OS 10.4 or later with 512MB of RAM, or 1.5GHz Intel Macs with 512MB of RAM, running OS 10.4.4 or later.

Both platforms require a VST, RTAS or AU plug-in compatible host.



The ARC's easy-on-the-eye GUI is straightforward to use

**FutureMusic VERDICT**

**BUILD**

**VALUE**

**EASE OF USE**

**VERSATILITY**

**RESULTS**

It won't make a badly designed studio sound amazing, but it may help you create better mixes.