

Recommended Setup Configurations

Because Dolby Atmos is not channel-based, you're not limited to any particular playback configuration. As your Dolby Atmos A/V receiver or pre-processor automatically allocates the sound output to whichever of the available speakers best reproduce the desired three-dimensional effect, you can use any combination of:

- Dolby Atmos-enabled R50 speaker modules on your floorstanding or bookshelf speakers
- KEF wall-mounted speakers
- KEF custom installed ceiling speakers



5.1.2 – version with 2 x R50



5.1.4 - version 4 x Ci in-ceiling



7.1.2 - version with 2 x Ci in-ceiling



7.1.4 - version with 4 x R50 + Side channels



9.1.2 - version with 2 x R50 + 2 x side channels



9.1.4 - version with 4 x Ci in-ceiling + 2 x side channels



Visit: [www.kef.com](http://www.kef.com) for more about KEF and its products.

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KEF ADDS A NEW DIMENSION TO YOUR DOLBY ATMOS EXPERIENCE



What is Dolby Atmos®?

Dolby Atmos is a quantum leap forward in surround sound technology because it literally adds a new dimension to your home theatre enjoyment.

In real life, sounds come from all around. But conventional channel-based surround systems only distribute sound in a horizontal plane: left and right, ahead and behind. Fine – until you hear Dolby Atmos. What makes the experience so staggeringly realistic is that the movement of each and every sound source in the scene is recreated as it moves through space – including vertically.

The effect is so real it's scary. Rain sounds so much like rain that you feel like heading for cover. You find yourself ducking when a helicopter flies low, or dodging when a bullet ricochets past. You can't help it – sonically, it's just as if you were actually there.

How does it work?

Dolby Atmos is the first and only audio technology that's based on mapping the exact position of individual sounds (called audio objects) in three-dimensional space rather than simply allocating channels. Any sound can be an object – a creaking door, a passing train, footsteps crunching on frosty leaves. As each object moves through the scene, its sound does the same. So accurately you can almost touch it.

For movie directors and sound designers, Dolby Atmos is a powerful new creative tool for involving the audience, telling the story and expressing their artistic vision. And for the viewer, it's the biggest advance in home theatre audio since the advent of surround sound, because it immerses you in a dynamic, much more authentic sound picture - and therefore, a more complete emotional experience.

Dolby Atmos is infinitely more flexible and adaptable than channel-based home theatre. When a Dolby Atmos stream is fed to a Dolby Atmos compatible A/V receiver, the receiver will render the object-based audio to your home theatre's unique speaker configuration to precisely recreate the sound the filmmakers intended. Dolby Atmos has the ability to adapt to diverse speaker setup. You can enjoy the full effect with just seven KEF speakers.

What equipment do I need?

With an A/V receiver or pre-processor that supports Dolby Atmos decoding and playback in your system, you can play Dolby Atmos content at home through any Blu-ray disc player or game console, or via your favourite streaming service (with the device set to bitstream output and secondary audio disabled). Then it's a just question of choosing the right speakers to add to your existing speaker set-up – and as the pioneers of high definition home theatre sound, KEF is the audiophile's choice.

KEF gives you two ways of reproducing the all-important vertical dimension encoded in Dolby Atmos soundtracks: by installing two or four Ci Series flush-mount speakers in the ceiling of the listening area, or adding the new KEF R50 up-firing Dolby Atmos-enabled speaker module to your existing front and rear satellites.

Either way, you'll be astonished at what a difference it makes to your enjoyment of film. You're ensconced in a truly three-dimensional acoustic space populated by precisely located individual sounds, some loud, some barely perceptible, that all move in relation to you as they would in real life. It's uncanny. Exhilarating. Sometimes terrifying, sometimes hilarious; always engrossing.

Which KEF speakers to choose?



R50 Dolby Atmos-enabled speakers

The simplest option is to mount KEF's new R50 Dolby Atmos-enabled speakers above your existing floorstanding or bookshelf home theatre speakers. Knowing how the brain subjectively perceives sound, KEF engineers have perfected a way of beaming the sound upwards so that it's reflected by the ceiling to accurately replicate the vertical dimension encoded in Dolby Atmos recordings.

R50 is the result. Designed to integrate perfectly with R Series and Reference ranges aesthetically as well as sonically, the R50 is built around KEF's latest award-winning Uni-Q® driver array, originally developed for the revolutionary KEF Blade.

With a sophisticated 25mm (1-in.) tweeter mounted at the exact acoustic centre of a high performance 130mm (5.25-in.) bass/ mid driver, it has excellent dynamics and power handling with exceptionally accurate, fast and clean midrange response. And with KEF's unique 'tangerine' waveguide precision engineered to maximise the unusually wide and even dispersion characteristics of the Uni-Q driver configuration, the R50 is ideally suited to beaming the sound upwards to express the vertical dimension that makes the Dolby Atmos experience so breathtakingly lifelike.

Whether you're adding R50s to your existing satellite speakers or upgrading to a new KEF home theatre system, no more space is required – the speaker footprint is the same.



Ci Series in-ceiling speakers

For the most cinema-like Dolby Atmos experience, you can complement your 5:1 or 7:1 home theatre set-up with two or four of KEF's full range in-ceiling speakers to capture the vertical dimension of the sound image.

Discreet in appearance and easy to install, our Ci models are the perfect sonic match for our freestanding speakers as they share the same award-winning acoustic technologies, including KEF's 'sit anywhere' Uni-Q array. With the tweeter at the heart of the bass/ mid driver to create the perfect point source, it's a configuration that's ideally suited to pinpointing sonic objects in three-dimensional space.

Which you choose will depend on the size of the area and the power handling you require. The Ci160QR boasts a 19mm (0.75-in) vented-tweeter in a 160mm (6.5-in.) bass/mid driver; the Ci200QR uses a 25mm (1-in.) vented tweeter in a larger 200mm (8-in.) bass/ mid driver for greater LF extension. The high-output Ci200RR-THX with THX Ultra2 approval steps up to a 38mm (1.5-in.) vented tweeter in a 200mm (8-in.) bass/mid driver with a massive magnet assembly for the deepest bass response.

All three models have the benefit of KEF's unique 'tangerine' waveguide to maximise dispersion across the viewing area so that everyone in the room enjoys the same precisely defined Dolby Atmos sonic imagery. And with KEF's Ultra-thin Bezel (UTB) design, they lie practically flush with the ceiling with minimum visual intrusion.

Whether you opt for the Ci160QR, Ci200QR or the formidably competent Ci200RR-THX, the lucid, spatially exact and delicately nuanced sound capabilities of KEF custom installed ceiling speakers allow you to enjoy the full Dolby Atmos cinema experience in your own home.



Product Features

R50 Dolby Atmos-enabled speaker

- High output two-way bass reflex music and home theatre speaker
- Uni-Q array with powerful 130mm (5.25-in.) aluminium bass/mid cone, Z-Flex surround and 38mm (1.5-in.) vented aluminium dome tweeter with 'tangerine' waveguide
- Internally braced enclosure with damping panels to minimise cabinet resonance and colouration for the purest, cleanest sound

In-ceiling speakers

Ci200RR-THX, THX Ultra2 Certified, high output two-way Uni-Q home theatre and music speaker (round)

- Uni-Q array with powerful 200mm (8-in.) aluminium bass/mid cone, Z-Flex surround and 38mm (1.5 in.) vented aluminium dome HF with 'tangerine' waveguide, projecting acoustically as if the sound was originating from the screen
- Extreme power handling and output
- Ultra-Thin Bezel for elegantly discreet appearance
- Same diameter as all KEF 200mm (8-in.) in-ceiling speakers



Ci200QR two-way Uni-Q home theatre and music speaker (round)

- 200mm (8-in.) Uni-Q array with 25mm (1-in.) aluminium dome tweeter with 'tangerine' waveguide
- Ultra-Thin Bezel for elegantly discreet appearance
- Gold plated, spring-loaded binding posts
- Same diameter as all KEF 200mm (8-in.) in-ceiling speakers

Ci160QR two-way Uni-Q home theatre and music speaker (round)

- 160mm (6.5-in.) Uni-Q array and 19mm (0.75-in.) aluminium dome tweeter with 'tangerine' waveguide
- Ultra-Thin Bezel for elegantly discreet appearance
- Gold plated, spring-loaded binding posts
- Same diameter as all KEF 165mm (6.5-in.) in-ceiling speakers

Please note that the KEF Ci Series models shown here were chosen because they share the same driver technology as the all-new R50. However, depending on space, budget and existing system configuration, any model from the KEF's extensive Ci Series range can be used to articulate the vertical acoustic dimension encoded in Dolby Atmos. For more information on the Ci Series, see: [www.kef.com](http://www.kef.com)

KEF Dolby Atmos speaker specifications

			
Model	R50	Model	Ci200RR-THX
Design	Closed box	Nominal Impedance	4Ω
Drive units	Uni-Q driver array: HF: 25mm (1in.) vented aluminium dome LF/MF: 130mm (5.25in.) aluminium	Sensitivity (2.83V/ 1m)	90dB
Frequency range (-6dB)	105Hz – 18.5kHz	Frequency response (±6dB) open-backed	33Hz - 28kHz
Crossover frequency	2.5kHz	Crossover frequency	2.2kHz
Amplifier type	Class D	Drive units	HF: 38mm (1.5 in.) Uni-Q LF: 200mm (8 in.)
Amplifier requirements	25 - 100W	Recommended Amplifier Power	10-190W
Sensitivity (2.83V/1m)	85dB	Product external dimensions (H x W x D)	Φ290 x 132.6mm Φ11.42 x 5.22 in.
Harmonic distortion 2nd & 3rd harmonics (90dB, 1m)	<0.4% 200Hz-20kHz	Cut-out dimensions	Φ238mm (Φ9.37 in.)
Maximum output	106dB	Net Weight	3.6 kg (7.94 lbs)
Nominal impedance	8Ω (min. 4.8Ω)	Mounting depth from surface	126.5 mm (4.98 in.)
Weight	4.5kg (9.9lbs.)	Optional rough in frame	RIF200R
Dimensions (H x W x D)	172 x 176 x 254 mm (6.7 x 6.9 x 10 in.) Not including the grille and the terminal		

			
Model	Ci200QR	Model	Ci160QR
Nominal Impedance	8Ω	Nominal Impedance	8Ω
Sensitivity (2.83V/ 1m)	90dB	Sensitivity (2.83V/ 1m)	89dB
Frequency response (±6dB) open-backed	35Hz - 34kHz	Frequency response (±6dB) open-backed	38Hz - 34kHz
Crossover frequency	2.2kHz	Crossover frequency	3.0kHz
Drive units	HF: 25mm (1.0in.) Uni-Q LF: 200mm (8.0in.)	Drive units	HF: 19mm (0.75in.) Uni-Q LF: 160mm (6.5in.)
Recommended Amplifier Power	10-150W	Recommended Amplifier Power	10-125W
Product external dimensions (H x W x D)	Diameter Ø: 289.6mm (11.4in.) Depth: 109.8mm (4.33in.)	Product external dimensions (H x W x D)	Diameter Ø: 234.6mm (9.24in.) Depth: 98mm (3.86in.)
Cut-out dimensions	Diameter Ø: 240mm (9.45in.)	Cut-out dimensions	Diameter Ø:196mm (7.71in.)
Mounting depth from surface	Product only: 103.3mm(4.07in.)	Mounting depth from surface	Product only: 91mm (3.58in.)
Optional rough in frame	RIF200R	Optional rough in frame	RIFI 60R