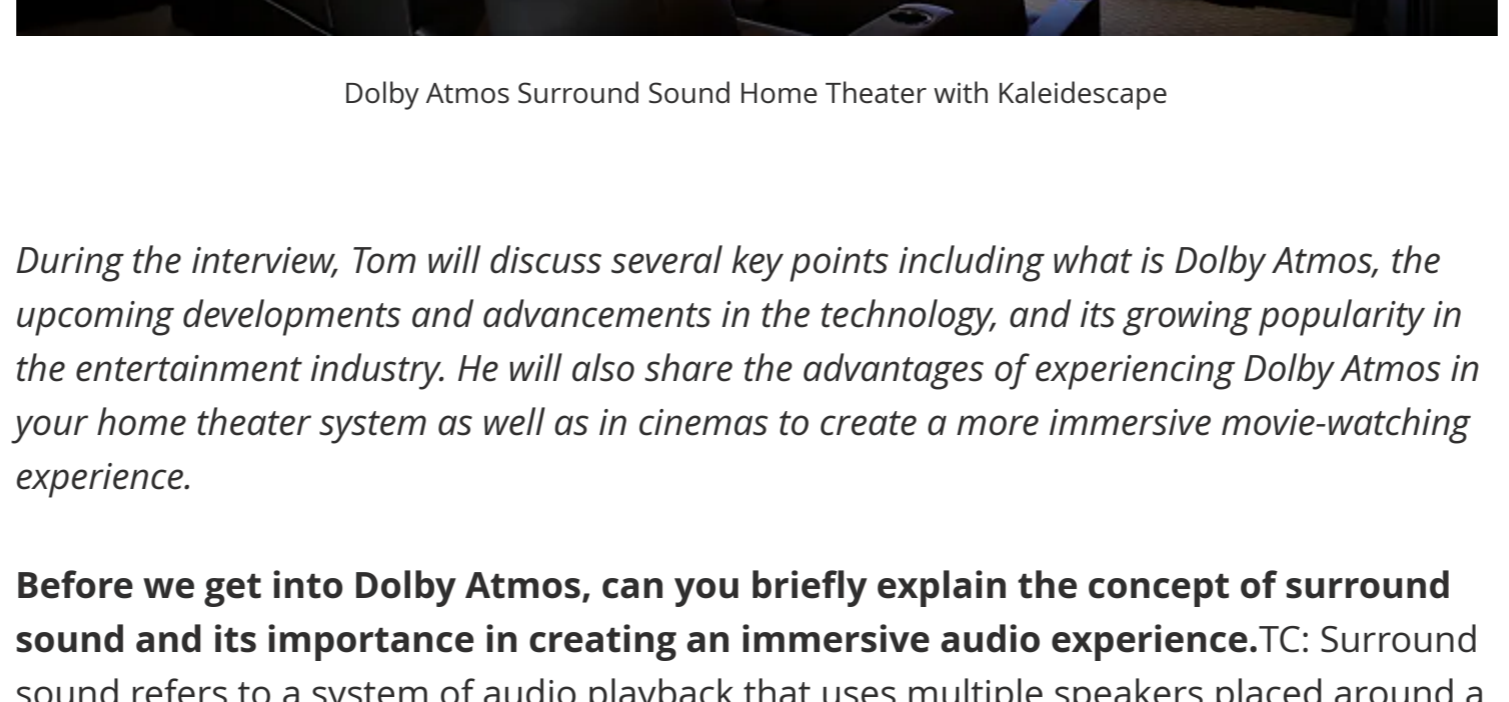


 Tom Curmin · Jul 20 · 9 min read

Home Theater Surround Sound and Dolby Atmos: Your Questions Answered!

Professional AV expert, Tom Curmin, explains what you need to know when looking to experience the best home theater surround sound and how Dolby Atmos fits in.



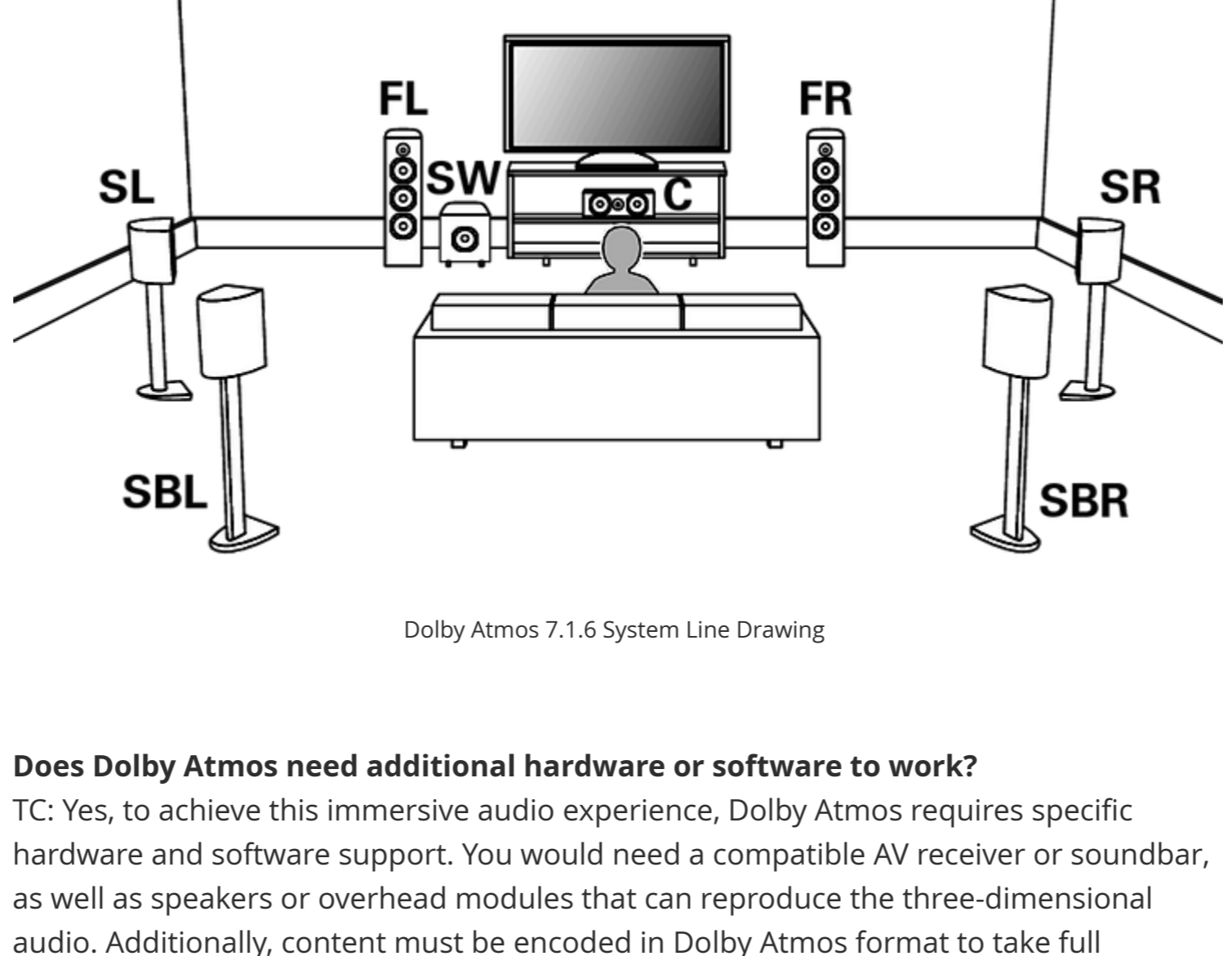
Dolby Atmos Surround Sound Home Theater with Kaleidescape

During the interview, Tom will discuss several key points including what is Dolby Atmos, the upcoming developments and advancements in the technology, and its growing popularity in the entertainment industry. He will also share the advantages of experiencing Dolby Atmos in your home theater system as well as in cinemas to create a more immersive movie-watching experience.

Before we get into Dolby Atmos, can you briefly explain the concept of surround sound and its importance in creating an immersive audio experience. TC: Surround sound refers to a system of audio playback that uses multiple speakers placed around a room to create a three-dimensional sound experience. The goal is to immerse the listener into a more realistic and engaging audio environment by reproducing sound from different directions and distances. The importance of surround sound lies in its ability to enhance the overall audio experience, whether it's for movies, music, or gaming. By accurately positioning sound sources and creating a sense of depth and space, surround sound can transport the listener into the world of the content they are experiencing, making it much more immersive and enjoyable.

What is Dolby Atmos, and why is it considered a revolutionary audio technology that takes surround sound to the next level? TC: Dolby Atmos is one of the most exciting developments in home theater audio in years and is now available in your living room. It is a cutting-edge audio format that provides a more immersive and realistic audio experience. Here is the difference. Unlike traditional surround sound systems that use channels and speakers to create a sense of directionality, Dolby Atmos takes a different approach by incorporating object-based audio. This means that sound can be precisely placed and moved in a three-dimensional space, creating a more accurate and lifelike audio environment. Dolby Atmos allows sound to be heard from all directions, including above and below, making it feel like you're truly in the middle of the action. It adds a new dimension to your audio experience and enhances the way we feel and perceive sound in movies, music, and games.

That is exciting. So how does Dolby Atmos work? TC: Let me explain, but first, it's important to understand the concept of channels and speakers in traditional surround sound systems. In a typical surround sound setup, the audio is divided into different channels, such as front left, front right, center, surround left, and surround right. These channels are played through the corresponding speakers that are placed around the room. While this setup can create a sense of directionality, it has limitations in terms of precision and immersion. On the other hand, Dolby Atmos takes a more advanced approach by using object-based audio and precise positioning. Instead of being tied to specific channels and speakers, the sounds in Dolby Atmos are treated as individual objects that can be placed and moved in a three-dimensional space. This allows for a more accurate and dynamic audio experience, as sound can be precisely positioned anywhere in the room. For example, in a Dolby Atmos setup, you can hear a helicopter flying overhead, raindrops falling all around you, or a car passing by from behind. This level of realism and immersion is what sets Dolby Atmos apart from traditional surround sound systems.



Dolby Atmos 7.1.6 System Line Drawing

Does Dolby Atmos need additional hardware or software to work? TC: Yes, to achieve this immersive audio experience, Dolby Atmos requires specific hardware and software support. You would need a compatible AV receiver or soundbar, as well as speakers or overhead modules that can reproduce the three-dimensional audio. Additionally, content must be encoded in Dolby Atmos format to take full advantage of the technology.

Keep in mind, Dolby Atmos is not limited to just movies. It is also being adopted in the music industry, allowing artists and producers to create more immersive and spatial audio experiences. With Dolby Atmos-enabled music, listeners can feel like they're in the middle of a live concert or surrounded by the instruments and vocals.

How does Dolby Atmos differ from traditional surround sound systems? TC: Just like we experience visually two dimensions and three dimensions, Dolby Atmos' audio technology takes surround sound to the next level by adding a new dimension of sound. While traditional surround sound systems use channels and speakers to create a basic sense of audio directionality, Dolby Atmos goes further and uses object-based audio to create a more complex, immersive, and realistic audio experience. Sounds in traditional surround sound systems, are limited in their movement and directionality. However, with Dolby Atmos, because sounds are treated as individual objects that can move freely in a three-dimensional space, it is more precise and dynamic. This means that sound can come from any direction, including above and below the listener, creating a more accurate and lifelike audio experience.

You already mentioned object-based audio and three-dimensional sound placement, can you provide a bit more detail on the key features and benefits. TC: Object-based audio is an independent object with its own metadata, such as location, volume, and direction. Atmos has several key features and benefits. It is a fundamental aspect of Dolby Atmos, it allows sound engineers to place individual sounds in a three-dimensional space. Even if you move your head, the sound will adjust accordingly. To put it another way, object-based audio is a more flexible and personalized sound experience.

With three-dimensional sound placement, sound can be placed not only around the listener but also above and below them, adding a new dimension to the audio experience, and providing the listener with an audio experience that simulates real life.

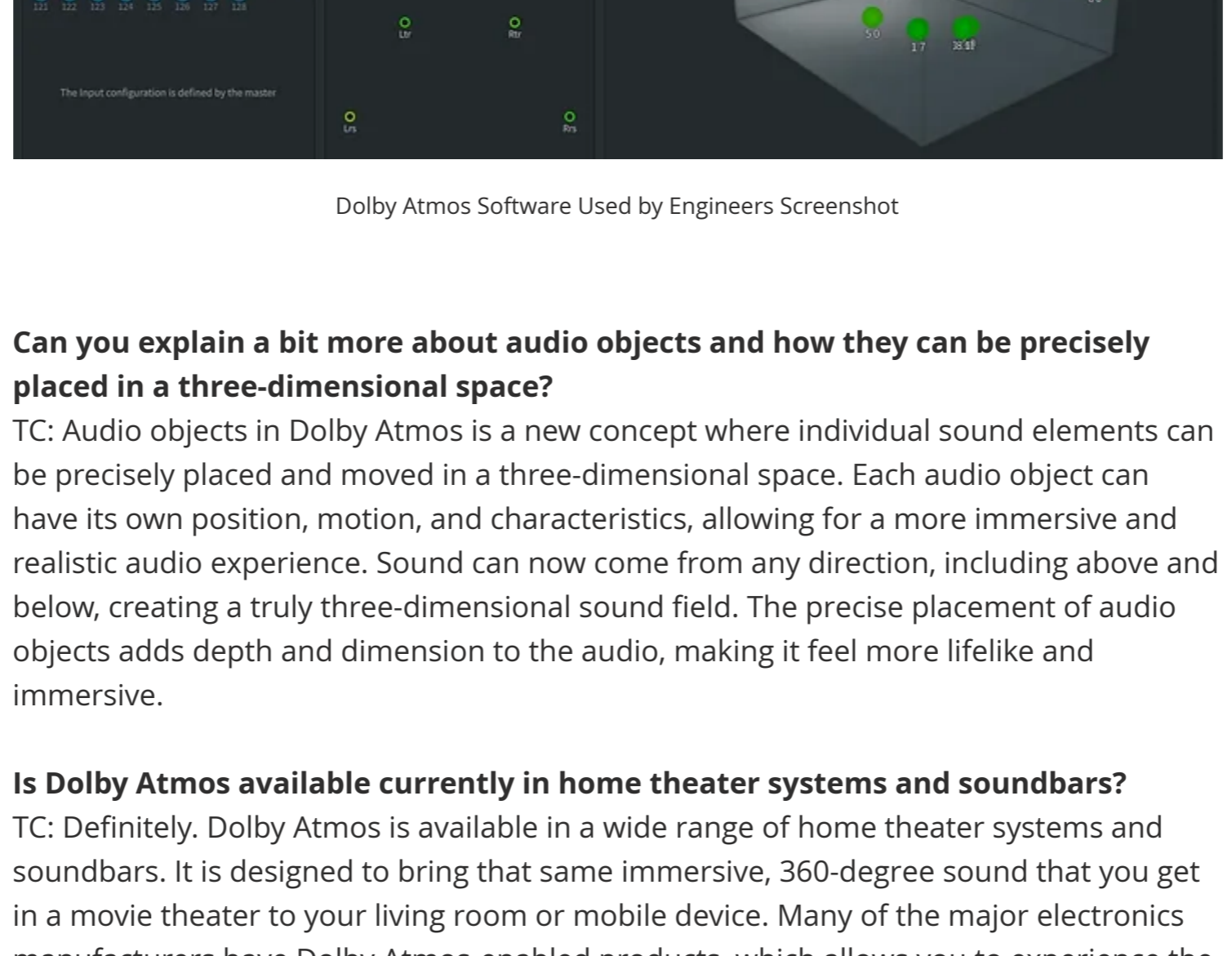
Let's get a bit technical here. Please explain how Dolby Atmos works and provide a technical overview of Dolby Atmos, including the use of overhead speakers and audio objects. TC: As I shared before, Dolby Atmos works by using object-based audio and overhead speakers to create a three-dimensional sound experience. Traditional surround sound systems use channels to assign specific sounds to specific speakers, but Dolby Atmos takes a different approach. Instead of channels, Dolby Atmos uses audio objects, which are individual sound elements that can be placed and moved in a three-dimensional space. This allows for more precise sound placement and a more immersive audio experience.

In a Dolby Atmos setup, there are speakers placed all around the room, including overhead speakers. These overhead speakers are crucial in creating a sense of height and depth in the audio. They allow sounds to be placed above the listener, adding a new dimension to the audio experience.

The audio objects in Dolby Atmos can be moved and placed anywhere in the three-dimensional space, allowing for a more dynamic and realistic sound experience. For example, if a helicopter is flying overhead in a movie, the sound of the helicopter can be precisely placed above the listener, creating a more immersive and realistic effect.

To achieve this, Dolby Atmos uses metadata, which is additional information embedded in the audio signal. This metadata contains instructions on how to process, position, and move the audio objects in the three-dimensional space. The Dolby Atmos decoder then uses this metadata to render the audio in real-time, based on the specific speaker setup in the room.

This technology allows for precise sound placement and movement, resulting in a more engaging and lifelike audio experience for the listener.

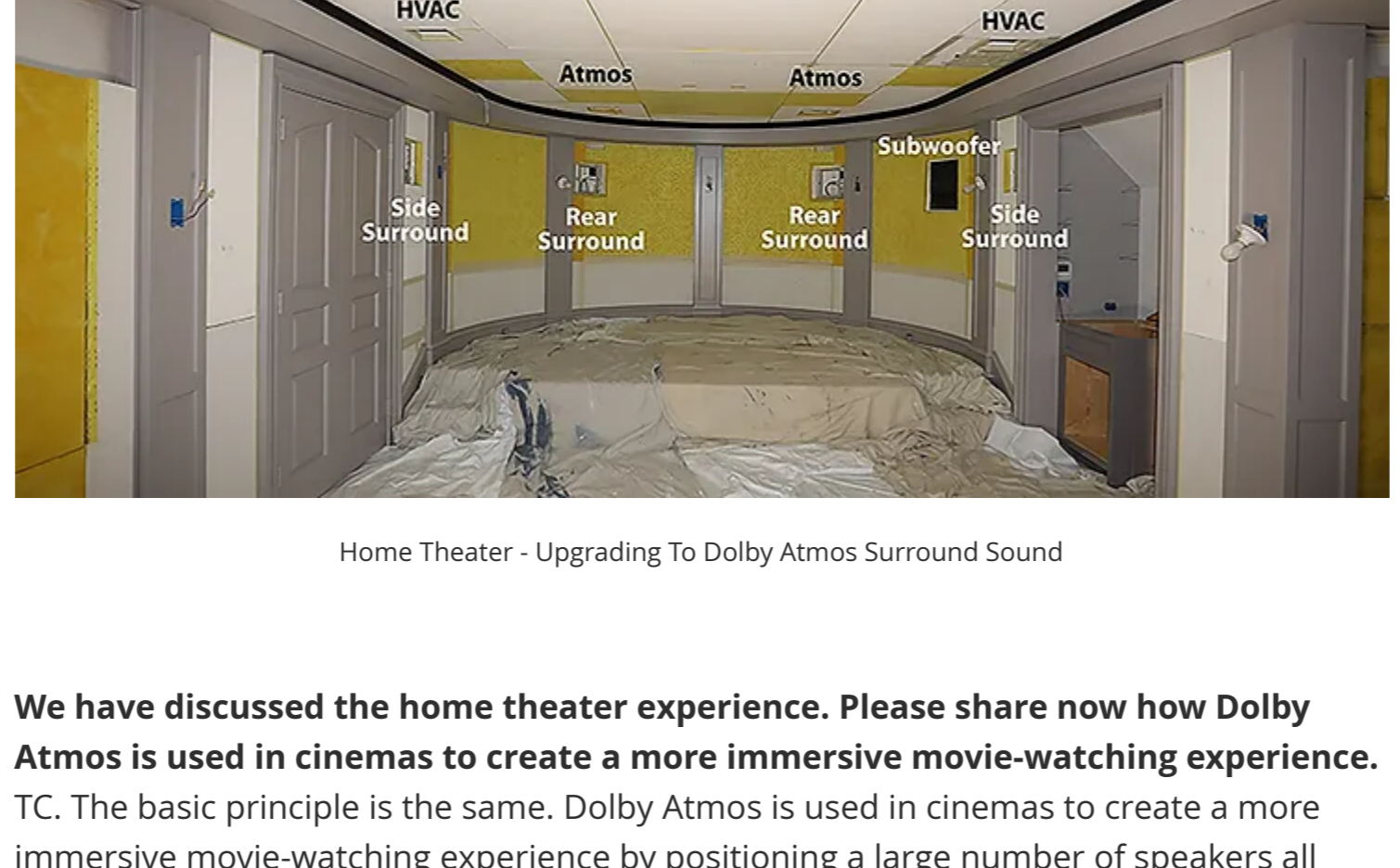


Dolby Atmos Software Used by Engineers Screenshot

Can you explain a bit more about audio objects and how they can be precisely placed in a three-dimensional space? TC: Audio objects in Dolby Atmos is a new concept where individual sound elements can be precisely placed and moved in a three-dimensional space. Each audio object can have its own position, motion, and characteristics, allowing for a more immersive and realistic audio experience. Sound can now come from any direction, including above and below, creating a truly three-dimensional sound field. The precise placement of audio objects adds depth and dimension to the audio, making it feel more lifelike and immersive.

Is Dolby Atmos available currently in home theater systems and soundbars? TC: Definitely, Dolby Atmos is available in a wide range of home theater systems and soundbars. It is designed to bring that same immersive, 360-degree sound that you get in a movie theater to your living room or mobile device. Many of the major electronics manufacturers have Dolby Atmos-enabled products, which allows you to experience the immersive audio in the comfort of your own home. These systems typically include upward-firing speakers or dedicated overhead speakers to create the three-dimensional sound field that Dolby Atmos is known for. Additionally, there are also soundbars available that incorporate Dolby Atmos technology, providing a more compact and convenient solution for those who may not have the space or desire for a full surround sound system. Overall, the availability of Dolby Atmos in home theater systems and soundbars has made it more accessible to a wider audience, allowing more people to enjoy the incredible audio experience it offers.

What are the advantages of experiencing Dolby Atmos at home, such as enhanced realism and immersion. TC: Experiencing Dolby Atmos at home offers several advantages, such as enhanced realism and immersion. In other words, a setting that more accurately represents how we experience sound in the real world, with sounds coming from all directions, including above you. This allows you to feel like you're truly in the middle of the action, whether you're watching a movie, playing a video game, or listening to music. This adds a new level of depth and detail to the audio, making it feel more realistic and engaging. As I mentioned, Dolby Atmos is compatible with a wide range of home theater systems and soundbars, making it accessible to those who already have or will be purchasing a home theater system.



Home Theater - Upgrading To Dolby Atmos Surround Sound

We have discussed the home theater experience. Please share now how Dolby Atmos is used in cinemas to create a more immersive movie-watching experience. TC: The basic principle is the same. Dolby Atmos is used in cinemas to create a more immersive movie-watching experience by positioning a large number of speakers all around the theater, including placing them overhead. This allows for precise placement of audio objects in a three-dimensional space, making the sound feel more realistic and immersive. With Dolby Atmos, filmmakers have the ability to create a more dynamic and immersive sound experience, enhancing the overall movie-watching experience for the audience. The very first Dolby Atmos production was in the Dolby Theater in Los Angeles for the June 2012 premiere of the Disney/Pixar animated film, *Brave*.

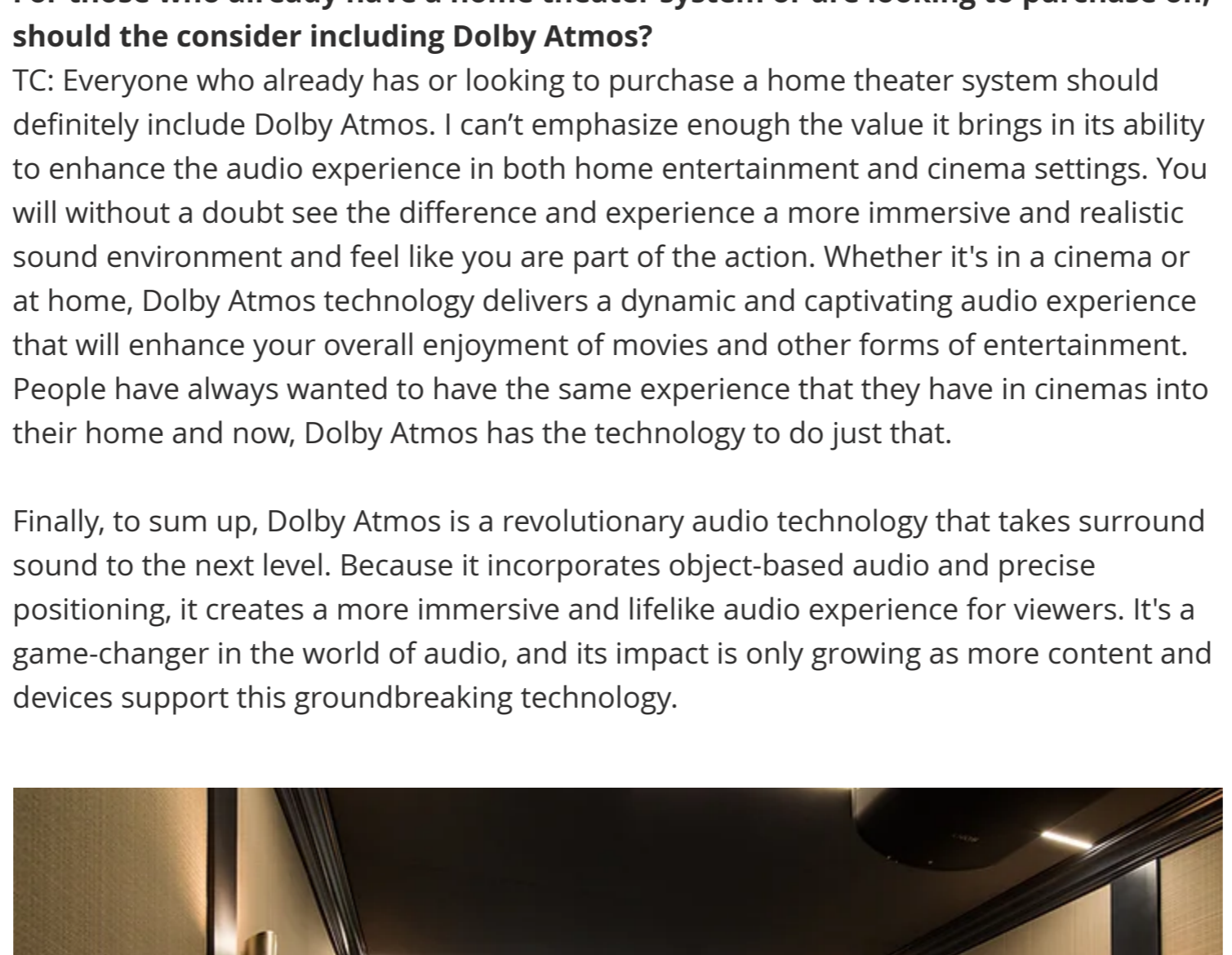
Discuss the benefits of Dolby Atmos in cinemas, such as improved sound localization and a more dynamic audio environment. TC: Dolby Atmos provides several benefits in cinemas, including improved sound localization and a more dynamic audio environment. With Dolby Atmos, sound can be precisely placed and moved in a three-dimensional space, allowing for a more accurate representation of where the sound is coming from. This enhances the overall movie-watching experience by making it feel more realistic and immersive. Additionally, with Dolby Atmos, sounds can move seamlessly around the audience, creating a more engaging and captivating experience.

Is this a short-term fad or is Dolby Atmos growing in popularity in the entertainment industry? TC: Dolby Atmos has been gaining popularity in the entertainment industry. It is being adopted by more and more filmmakers, sound designers, and content creators due to its ability to provide a more immersive and realistic audio experience. Many major studios and streaming platforms are now producing content in Dolby Atmos, and there is a growing demand for Dolby Atmos-enabled theaters and home theater systems.

What about the future? Is Dolby working on any upcoming developments or advancements in the technology? TC: Definitely, there are several upcoming developments and advancements in Dolby Atmos technology and Dolby is constantly working on improving the technology and expanding its capabilities. One of the more recent advancements is the introduction of Dolby Atmos for headphones, which allows users to experience immersive audio on their personal devices. Additionally, Dolby is also working on integrating Dolby Atmos into gaming consoles, providing gamers with a more immersive and realistic audio experience. Dolby is also collaborating with content creators and streaming platforms to ensure that more movies, TV shows, and music are available in Dolby Atmos format. Overall, Dolby is committed to pushing the boundaries of audio technology and providing users with the best possible audio experience.

For those who already have a home theater system or are looking to purchase one, should the consider including Dolby Atmos? TC: Everyone who already has or looking to purchase a home theater system should definitely include Dolby Atmos. I can't emphasize enough the value it brings in its ability to enhance the audio experience in both home entertainment and cinema settings. You will without a doubt see the difference and experience a more immersive and realistic sound environment and feel like you are part of the action. Whether it's in a cinema or at home, Dolby Atmos technology delivers a dynamic and captivating audio experience that will enhance your overall enjoyment of movies and other forms of entertainment. People have always wanted to have the same experience that they have in cinemas into their home and now, Dolby Atmos has the technology to do just that.

Finally, to sum up, Dolby Atmos is a revolutionary audio technology that takes surround sound to the next level. Because it incorporates object-based audio and precise positioning, it creates a more immersive and lifelike audio experience for viewers. It's a game-changer in the world of audio, and its impact is only growing as more content and devices support this groundbreaking technology.



Bravo AV Dolby Atmos Home Theater Showroom Bernardsville NJ

Visit our Showroom!

While this article is very informative, nothing beats hearing it for yourself. Please call us to see up and appointment and enjoy a true Dolby Atmos experience in our dedicated home theater.

Tom Curmin, the owner of Bravo AV, is a CEDIA Professional Designer, THX certified professional home theater Level 1 and Home Acoustic Alliance trained to Level II. Bravo AV is a HTA (Home Technology Association) Certified Install Firm. Tom may be reached at 908-953-0555 or Tom@BravoAV.com.

Contact

Bravo AV
80 Morristown Rd.
Bernardsville, NJ 07924
[Click To Email Us](mailto:Tom@BravoAV.com)
[Tel. \(908\) 953-0555](tel:9089530555)

[f](#) [t](#) [in](#) [p](#) [@](#)

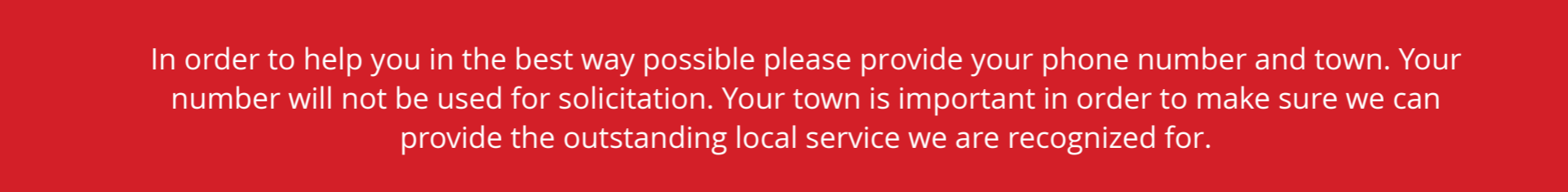
5 views

Recent Posts

- [When is the best time to buy a new TV?](#)
- [Home Theater Projectors: Your Questions Answered!](#)
- [Who makes the Best Movie Server?](#)

What brings you to Bravo AV of New Jersey, and how can we help?

In order to help you in the best way possible please provide your phone number and town. Your number will not be used for solicitation. Your town is important in order to make sure we can provide the outstanding local service we are recognized for.



- Knowledge Center**
 - Home Audio
 - Home Automation
 - Home Theater
 - Lutron Lighting
 - Motorized Shades
 - Media Rooms
 - Multi-Room Audio
 - Outdoor Shades
 - Outdoor Speakers
 - Outdoor TV
 - Speakers
 - Surround Sound
- Our Services**
 - Home Audio
 - Home Automation
 - Home Theater
 - Theater Seating
 - Landscape Lighting
 - Lighting Design
 - Luxury Private Cinemas
 - Media Rooms
 - Mirror TV
 - Motorized Shades
 - Multi-Room Audio
 - Outdoor Entertainment Centers
 - Outdoor Lighting
 - Outdoor Shades
 - Outdoor Speakers
 - Outdoor TV
 - Projectors
 - RadioShack
 - Surround Sound
 - TV Installation
 - WiFi
 - Window Treatments
- Partners**
 - Foral
 - Kaleidescape
 - Lutron Shades
 - Meridian
 - Next
 - Samsung
 - Savant
 - Sonos
 - Sony
 - T&G
- Information**
 - About
 - Kaleidescape
 - Contact
 - Design | Build | Process
 - Featured Projects
 - Knowledge Center
 - Partners
 - Privacy Policy
 - Showroom
 - Team
 - Home Theater Guide
- Contact**
 - 80 Morristown Rd. | Bernardsville, NJ 07924
 - Click To Email Us
 - Tel. (908) 953-0555



Hours
Mon. - Fri. 9am - 6pm or by appointment

