

[Audio Toolbox](#) / SpatialAudioExperience

Protocol

# SpatialAudioExperience

Configure an audio stream for spatial computing.

visionOS 26.0+

```
protocol SpatialAudioExperience : Decodable, Encodable, Hashable, Sendable
```

## Mentioned in

 [Anchoring sound to a window or volume](#)

## Overview

All audio playback APIs support 3D spatial rendering using SpatialAudioExperience. For example, with [AVAudioPlayer](#):

```
// Create a player.  
let myPlayer = try AVAudioPlayer(contentsOf: myAudioFileURL)  
  
// Configure an audio player with a head-tracked spatial audio experience  
// so that it's audible from a distinct location in space.  
myPlayer.intendedSpatialExperience = .headTracked  
  
// Play sound with the configured spatial audio experience.  
player.play()
```

### See Also

- [`SpatialAudioExperiences.AnchoringStrategy`](#)
- [`SpatialAudioExperiences.SoundStageSize`](#)

## Topics

### Type Properties

`static var automatic: AutomaticSpatialAudio`

An automatic spatial experience.

`static var bypassed: BypassedSpatialAudio`

A bypassed spatial audio experience.

`static var fixed: FixedSpatialAudio`

A fixed spatial audio experience with an automatic sound stage size.

`static var headTracked: HeadTrackedSpatialAudio`

A head-tracked spatial audio experience with an automatic anchoring strategy and automatic sound stage size.

### Type Methods

`static func fixed(soundStageSize: SpatialAudioExperiences.SoundStageSize) -> Self`

Create a fixed spatial audio experience with a specific sound stage size.

`static func headTracked(SpatialAudioExperiences.AnchoringStrategy, soundStageSize: SpatialAudioExperiences.SoundStageSize) -> Self`

Create a head-tracked spatial audio experience with a specific anchoring strategy and sound stage size.

---

## Relationships

# Inherits From

- Decodable
- Encodable
- Equatable
- Hashable
- Sendable
- SendableMetatype

# Conforming Types

- AutomaticSpatialAudio
- BypassedSpatialAudio
- FixedSpatialAudio
- HeadTrackedSpatialAudio