

[AVFoundation](#) / [AVOutputSettingsAssistant](#)

Class

AVOutputSettingsAssistant

An object that builds audio and video output settings dictionaries.

iOS 7.0+ | iPadOS 7.0+ | Mac Catalyst 13.1+ | macOS 10.9+ | tvOS 9.0+ | visionOS 1.0+

```
class AVOutputSettingsAssistant
```

Overview

Use an output settings assistant to create the audio and video settings that you use to configure instances of [AVAssetWriter](#) and [AVAssetWriterInput](#). You create an assistant with a specific preset configuration, such as [hevc3840x2160WithAlpha](#) or [preset1920x1080](#). You can accept the settings dictionaries as is to generate a file that conforms to the criteria that the preset implies. You may also use the dictionaries it generates as a base configuration that you can customize as you require.

Providing the assistant additional details about your source media helps it generate more complete results. For example, setting a value for its [sourceVideoFormat](#) property ensures that the assistant generates settings that don't scale up video frames from a smaller size.

Topics

Creating an assistant

```
convenience init?(preset: AVOutputSettingsPreset)
```

Creates an output setting assistant with a preset configuration.

`struct AVOutputSettingsPreset`

A structure that defines preset configurations for an output settings assistant.

`class func availableOutputSettingsPresets() -> [AVOutputSettingsPreset]`

Returns an array of preset values to use to initialize an output settings assistant.

Configuring output settings

`var outputFileType: AVFileType`

A uniform type identifier (UTI) that indicates the type of file to write.

`var audioSettings: [String : Any]?`

An audio settings dictionary.

`var sourceAudioFormat: CMAudioFormatDescription?`

The format of the source audio data.

`var videoSettings: [String : Any]?`

A video settings dictionary.

`var sourceVideoFormat: CMVideoFormatDescription?`

The format of the source video data.

`var sourceVideoMinFrameDuration: CMTime`

A time value that describes the minimum frame duration of the video data.

`var sourceVideoAverageFrameDuration: CMTime`

A time value that describes the average frame duration of the video data.

Relationships

Inherits From

`NSObject`







Conforms To

`CVarArg`

CustomDebugStringConvertible
CustomStringConvertible
Equatable
Hashable
NSObjectProtocol

See Also

Media writing

-  **Converting projected video to Apple Projected Media Profile**
Convert content with equirectangular or half-equirectangular projection to APMP.
-  **Converting side-by-side 3D video to multiview HEVC and spatial video**
Create video content for visionOS by converting an existing 3D HEVC file to a multiview HEVC format, optionally adding spatial metadata to create a spatial video.
-  **Writing fragmented MPEG-4 files for HTTP Live Streaming**
Create an HTTP Live Streaming presentation by turning a movie file into a sequence of fragmented MPEG-4 files.
-  **Creating spatial photos and videos with spatial metadata**
Add spatial metadata to stereo photos and videos to create spatial media for viewing on Apple Vision Pro.
-  **Tagging media with video color information**
Inspect and set video color space information when writing and transcoding media.
-  **Evaluating an app's video color**
Check color reproduction for a video in your app by using test patterns, video test equipment, and light-measurement instruments.

`class AVAssetWriter`

An object that writes media data to a container file.

`class AVAssetWriterInput`

An object that appends media samples to a track in an asset writer's output file.

`class AVAssetWriterInputPixelBufferAdaptor`

An object that appends video samples to an asset writer input.

```
class AVAssetWriterInputTaggedPixelBufferGroupAdaptor
```

An object that appends tagged buffer groups to an asset writer input.

```
class AVAssetWriterInputMetadataAdaptor
```

An object that appends timed metadata groups to an asset writer input.

```
class AVAssetWriterInputGroup
```

A group of inputs with tracks that are mutually exclusive to each other for playback or processing.