Structure

ImmersiveCameraCalibration

A structure that represents immersive media camera calibration data.

macOS 26.0+ | visionOS 26.0+

```
struct ImmersiveCameraCalibration
```

Overview

This data includes calibration type, calibration name, calibration file name, lens definition, mask data, camera origin, and other relevant data.

Topics

Structures

struct `CameraOrigin`

A type that holds the position information representing the origin from which to render the calibration in 3D space relative to the person's eye.

struct `CameraTextureMapping`

A type that holds the matrices used for video frame texture mapping on the camera lens geometry.

Enumerations

```
enum CalibrationType
```
A value that represents the calibration type used to generate camera calibration geometry.

Initializers

```
init(name: String, type: ImmersiveCameraCalibration.CalibrationType,
mask: ImmersiveCameraMask?, positionable: Bool, origin: ImmersiveCamera
Calibration.CameraOrigin, textureMapping: ImmersiveCameraCalibration.
CameraTextureMapping, environmentFilename: String?)
```
Creates a mesh based calibration from USDZ data and a image-based mask.

Instance Properties

```
var environmentFilename: String?
```
The USDZ filename of a backdrop to use for this calibration.

```
var mask: ImmersiveCameraMask?
```
Immersive camera mask that needs to be used for this calibration.

```
var name: String
```
A string identifying this calibration.

```
var origin: ImmersiveCameraCalibration.CameraOrigin
```
Position information that represents the origin from which to render the calibration in 3D space relative to the person's eye.

```
var positionable: Bool
```
A Boolean value that indicates whether to anchor this calibration in mixed reality 3D space rather than centering it on the person's eye position.

```
var textureMapping: ImmersiveCameraCalibration.CameraTextureMapping
```
Texture mapping that describes how each section of the video frame maps into the calibration.

```
var type: ImmersiveCameraCalibration.CalibrationType
```
The type of this calibration.

Relationships

Conforms To

```
Decodable
Encodable
Sendable
SendableMetatype
```

See Also

Camera metadata

`actor` `VenueDescriptor`

The Apple Immersive Media Venue Descriptor is a collection of static metadata necessary for every Apple Immersive Video.

`struct` `ImmersiveCamera`

A structure that holds the required information for an immersive media camera to process and render video frames.

`enum` `ImmersiveCameraMask`

A structure that holds the camera mask type information and its relevant mask name.

`struct` `ImmersiveDynamicMask`

A type that holds the information required to dynamically generate an immersive media mask at load time.