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# AVCaptureVideoPreviewLayer Class Reference

Audio & Video



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## **Document Revision History 11**

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# AVCaptureVideoPreviewLayer Class Reference

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<b>Inherits from</b>	CALayer : NSObject
<b>Conforms to</b>	NSCoding (CALayer) CAMediaTiming (CALayer) NSObject (NSObject)
<b>Framework</b>	/System/Library/Frameworks/AVFoundation.framework
<b>Availability</b>	Available in iOS 4.0 and later.
<b>Declared in</b>	AVCaptureVideoPreviewLayer.h

## Overview

`AVCaptureVideoPreviewLayer` is a subclass of `CALayer` that allows you use to display video as it is being captured by an input device.

You use this preview layer in conjunction with an AV capture session, as illustrated in the following code fragment:

```
AVCaptureSession *captureSession = <#Get a capture session#>;
AVCaptureVideoPreviewLayer *previewLayer = [AVCaptureVideoPreviewLayer
layerWithSession:captureSession];
UIView *aView = <#The view in which to present the layer#>;
previewLayer.frame = aView.bounds; // Assume you want the preview layer to fill
the view.
[aView.layer addSubview:previewLayer];
```

## Tasks

### Creating a Session

- [initWithSession:](#) (page 9)  
Initializes a preview layer with a given capture session.
- + [layerWithSession:](#) (page 8)  
Returns a preview layer initialized with a given capture session.

## Layer Configuration

[orientation](#) (page 7) *property*

The layer's orientation.

[orientationSupported](#) (page 7) *property*

Indicates whether the layer display supports changing the orientation. (read-only)

[mirrored](#) (page 6) *property*

Indicates whether the layer display is mirrored.

[mirroringSupported](#) (page 7) *property*

Indicates whether the layer display supports mirroring. (read-only)

[automaticallyAdjustsMirroring](#) (page 6) *property*

Indicates whether the layer display automatically adjusts mirroring.

[videoGravity](#) (page 8) *property*

Indicates how the video is displayed within a player layer's bounds rect.

[session](#) (page 8) *property*

The capture session with which the layer is associated.

## Properties

For more about Objective-C properties, see “Properties” in *The Objective-C Programming Language*.

### automaticallyAdjustsMirroring

Indicates whether the layer display automatically adjusts mirroring.

```
@property(nonatomic) BOOL automaticallyAdjustsMirroring
```

#### Discussion

The default value is YES.

#### Availability

Available in iOS 4.0 and later.

#### Declared In

AVCaptureVideoPreviewLayer.h

### mirrored

Indicates whether the layer display is mirrored.

```
@property(nonatomic, getter=isMirrored) BOOL mirrored
```

#### Discussion

To change the value of this property, the value of [automaticallyAdjustsMirroring](#) (page 6) must be NO.

**Availability**

Available in iOS 4.0 and later.

**Declared In**

AVCaptureVideoPreviewLayer.h

## **mirroringSupported**

Indicates whether the layer display supports mirroring. (read-only)

@property(nonatomic, readonly, getter=isMirroringSupported) BOOL mirroringSupported

**Discussion**

**Availability**

Available in iOS 4.0 and later.

**Declared In**

AVCaptureVideoPreviewLayer.h

## **orientation**

The layer's orientation.

@property(nonatomic) AVCaptureVideoOrientation orientation

**Discussion**

**Availability**

Available in iOS 4.0 and later.

**Declared In**

AVCaptureVideoPreviewLayer.h

## **orientationSupported**

Indicates whether the layer display supports changing the orientation. (read-only)

@property(nonatomic, readonly, getter=isOrientationSupported) BOOL  
orientationSupported

**Discussion**

**Availability**

Available in iOS 4.0 and later.

**Declared In**

AVCaptureVideoPreviewLayer.h

## session

The capture session with which the layer is associated.

```
@property(n nonatomic, retain) AVCaptureSession *session
```

### Discussion

#### Availability

Available in iOS 4.0 and later.

#### Declared In

AVCaptureVideoPreviewLayer.h

## videoGravity

Indicates how the video is displayed within a player layer's bounds rect.

```
@property(copy) NSString *videoGravity
```

### Discussion

Options are `AVLayerVideoGravityResizeAspect`, `AVLayerVideoGravityResizeAspectFill` and `AVLayerVideoGravityResize`. The default is `AVLayerVideoGravityResizeAspect`.

#### Availability

Available in iOS 4.0 and later.

#### Declared In

AVCaptureVideoPreviewLayer.h

## Class Methods

### layerWithSession:

Returns a preview layer initialized with a given capture session.

```
+ (id)layerWithSession:(AVCaptureSession *)session
```

#### Parameters

*session*

The capture session from which to derive the preview.

#### Return Value

A preview layer initialized to use *session*.

### Discussion

#### Availability

Available in iOS 4.0 and later.

#### Declared In

AVCaptureVideoPreviewLayer.h



## Instance Methods

### **initWithSession:**

Initializes a preview layer with a given capture session.

```
- (id)initWithSession:(AVCaptureSession *)session
```

#### **Parameters**

*session*

The capture session from which to derive the preview.

#### **Return Value**

A preview layer initialized to use *session*.

#### **Discussion**

#### **Availability**

Available in iOS 4.0 and later.

#### **Declared In**

AVCaptureVideoPreviewLayer.h



# Document Revision History

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This table describes the changes to *AVCaptureVideoPreviewLayer Class Reference*.

Date	Notes
2010-05-15	New document that describes a subclass of CALayer that allows you to display video as it is being captured by a device.

**REVISION HISTORY**

Document Revision History