

[Accelerate](#) / [...  
vImage\\_PixelBuffer](#) / `init(referencing:planeIndex:overrideSize:pixelFormat:)`

## Initializer

**init(referencing:planeIndex:overrideSize:  
pixelFormat:)**

Initializes a pixel buffer by refencing the data from a single plane of a multiplane Core Video pixel buffer.

iOS 16.0+ | iPadOS 16.0+ | Mac Catalyst | macOS 13.0+ | tvOS 16.0+ | visionOS | watchOS 9.0+

```
init(  
    referencing lockedCVPixelBuffer: CVPixelBuffer,  
    planeIndex: Int,  
    overrideSize: vImage.Size? = nil,  
    pixelFormat: Format.Type = Format.self  
)
```

Available when Format conforms to SinglePlanePixelFormat.

## Parameters

## LockedCVPixelBuffer

The locked Core Video pixel buffer. Use `CVPixelBufferLockBaseAddress\( : : \)` and `CVPixelBufferUnlockBaseAddress\( : : \)` to lock and unlock the pixel buffer.

**planeIndex**

The index of the plane that the function references.

`overrideSize`

An optional size that overrides the size returned by `CVPixelBufferGetHeightOfPlane( : : )` and `CVPixelBufferGetWidthOfPlane( : : )`. Use this parameter if you

intend to pass the buffer to the any-to-any converter that requires all buffers to be the same size.

## pixelFormat

The pixel format of the initialized buffer.

---

## See Also

### Creating a pixel buffer from a Core Video buffer

```
init(copying: CVPixelBuffer, cvImageFormat: vImageCVImageFormat, cgImageFormat: inout vImage_CGImageFormat, pixelFormat: Format.Type)  
throws
```

Initializes a pixel buffer by copying the data from a Core Video pixel buffer.

```
init(referencing: CVPixelBuffer, converter: vImageConverter,  
destinationPixelFormat: Format.Type)
```

Returns a new pixel buffer that references the specified Core Video pixel buffer and populated converter.