

[AudioDriverKit](#) / [IOUserAudioBox](#)

## Class

# IOUserAudioBox

A container for other audio objects, typically audio devices and audio clock devices.

DriverKit 21.0+

```
class IOUserAudioBox;
```

## Overview

Along with containing other audio objects, [IOUserAudioBox](#) publishes identifying information about itself and allows you to enable or disable the box. When disabled, the box's contents aren't available.

## Topics

### Creating an Audio Box

#### Create

Allocates and initializes an instance of the audio box class.

#### init

Initializes an instance of the audio box class.

#### IOUserAudioDriver

A DriverKit provider object that manages communications with an audio device.

## Freeing an Audio Box

`free`

Frees the audio box.

## Getting Information About the Class

`GetClassID`

Gets the audio class identifier of the object.

`GetBaseClassID`

Gets the audio class identifier of the base class object.

`IOUserAudioClassID`

An identifier for the type of audio object.

## Identifying the Box

`GetUID`

Returns the UID of the audio box.

## Managing Box Contents

`AddDevice`

Adds an audio device to the audio box.

`RemoveDevice`

Removes an audio device from the audio box.

`IOUserAudioDevice`

An audio clock device object that handles the configurations for running I/O.

`AddClockDevice`

Adds an audio clock device to the audio box.

`RemoveClockDevice`

Adds an audio clock device to the audio box.

`IOUserAudioClockDevice`

An audio clock device object, used to synchronize and perform I/O.

## Managing Protection State

### SetIsProtected

Sets a Boolean value that indicates if the box requires authentication before use.

### IsProtected

Returns a Boolean value that indicates if the box requires authentication before use.

## Managing Acquirability

### HandleChangeAcquireBox

Informs the box of a change to its acquisition state.

### SetIsAcquired

Set the box's acquisition state.

### IsAcquired

Returns a Boolean value that indicates the box's acquisition state.

### SetIsAcquirable

Set the box's acquirability state.

### IsAcquirable

Returns a Boolean value that indicates the box's acquirability state.

### SetAcquisitionFailure

Sets the error code to return when box acquisition fails.

### GetAcquisitionFailure

Returns the error code for use when box acquisition fails.

## Determining Media Support

### SetHasAudio

Sets a Boolean value that indicates the box's audio support.

### HasAudio

Returns a Boolean value that indicates the box's audio support.

## SetHasVideo

Sets a Boolean value that indicates the box's video support.

## HasVideo

Returns a Boolean value that indicates the box's video support.

## SetHasMIDI

Sets a Boolean value that indicates the box's MIDI support.

## HasMIDI

Returns a Boolean value that indicates the box's MIDI support.

# Working with Transport Types

## SetTransportType

Sets the box's transport type.

## GetTransportType

Returns the box's transport type.

## IOUserAudioTransportType

The type of transport to deliver audio.

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# Relationships

## Inherits From

IOUserAudioObject