

## Audio Toolbox

# AudioConverterFillComplexBufferWithPacketDependencies(\_:\_:\_:\_:\_:\_)

iOS 26.0+ | iPadOS 26.0+ | Mac Catalyst 26.0+ | macOS 26.0+ | tvOS 26.0+ | visionOS 26.0+

```
func AudioConverterFillComplexBufferWithPacketDependencies(
    _ inAudioConverter: AudioConverterRef,
    _ inInputDataProc: AudioConverterComplexInputDataProc,
    _ inInputDataProcUserData: UnsafeMutableRawPointer?,
    _ ioOutputDataPacketSize: UnsafeMutablePointer<UInt32>,
    _ outOutputData: UnsafeMutablePointer<AudioBufferList>,
    _ outPacketDescriptions: UnsafeMutablePointer<AudioStreamPacket
Description>?,
    _ outPacketDependencies: UnsafeMutablePointer<AudioStreamPacketDependency
Description>
) -> OSStatus
```

## Parameters

## inAudioConverter

The audio converter to use for format conversion.

## inInputDataProc

A callback function that supplies audio data to convert. This callback is invoked repeatedly as the converter is ready for new input data.

## inInputDataProcUserData

Custom data for use by your application when receiving a callback invocation.

### **ioOutputDataPacketSize**

On input, the size of the output buffer (in the `outOutputData` parameter), expressed in number packets in the audio converter's output format. On output, the number of packets of converted data that were written to the output buffer.

### **outOutputData**

The converted output data is written to this buffer. On entry, the buffers' `mDataByteSize` fields (which must all be the same) reflect buffer capacity. On exit, `mDataByteSize` is set to the number of bytes written.

### **outPacketDescriptions**

If not `NULL`, and if the audio converter's output format uses packet descriptions, this must point to a block of memory capable of holding the number of packet descriptions specified in the `ioOutputDataPacketSize` parameter. (See *Audio Format Services Reference* for functions that let you determine whether an audio format uses packet descriptions). If not `NULL` on output and if the audio converter's output format uses packet descriptions, then this parameter contains an array of packet descriptions.

### **outPacketDependencies**

Should point to a memory block capable of holding the number of packet dependency description structures specified in the `ioOutputDataPacketSize` parameter. Must not be `NULL`. This array will be filled out only by encoders that produce a format which has a non-zero value for `kAudioFormatProperty_FormatEmploysDependentPackets`.

## **Return Value**

A result code.

## **Discussion**

Converts audio data supplied by a callback function, supporting non-interleaved and packetized formats, and also supporting packet dependency descriptions.

For output formats that use packet dependency descriptions, this must be used instead of `AudioConverterFillComplexBuffer`, which will return an error for such formats.