

[Speech](#) / AnalyzerInput

Structure

AnalyzerInput

Time-coded audio data.

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

```
struct AnalyzerInput
```

Overview

The audio data must have an `AVAudioFormat` that is supported by the analyzer's modules; the analyzer does not perform audio conversion. Call [`bestAvailableAudioFormat\(compatibleWith:considering:\)`](#) (or its variants) to select an appropriate format to convert to.

The audio format may differ from one `AnalyzerInput` object to the next. The modules will be reconfigured if necessary (and possible) as needed.

Topics

Creating an input element

`init(buffer: AVAudioPCMBuffer)`

Creates an audio input object.

`init(buffer: AVAudioPCMBuffer, bufferStartTime: CMTime?)`

Creates an audio input object for audio that may be discontiguous with previous input.

Inspecting an input element

```
let buffer: AVAudioPCMBuffer  
    The audio buffer containing this input.
```

```
let bufferStartTime: CMTime?  
    The time-code of this input.
```

Relationships

Conforms To

Sendable, SendableMetatype

See Also

Input and output

```
protocol SpeechModuleResult  
    Protocol that all module results conform to.
```