

[Game Controller / GCStylus](#)

Class

# GCStylus

An object that represents a physical stylus connected to the device.

visionOS 26.0+

```
class GCStylus
```

## Mentioned in

 Discovering and tracking spatial game controllers and styli

## Overview

Use the `stylus` property to get the currently connect stylus accessories when your application starts. Register for `GCStylusDidConnectNotification` and `GCStylusDidDisconnectNotification` to get notified when a stylus connects or disconnects while your application is running.

```
// Register for notifications
NotificationCenter.default.addObserver(self, selector: #selector(stylus(didConnect:))
NotificationCenter.default.addObserver(self, selector: #selector(stylus(didDisconnect:))

// Query current stylus devices
for stylus in GCStylus.styluses {
    ...
}

// Later, handle connection
@objc func stylus(didConnect notification: Notification) {
```

```
guard let stylus = notification.object as? GCStylus else { return }
...
}
```

Check the `productCategory` to determine the type of stylus. A spatial stylus - capable of 6DoF tracking by Apple Vision Pro - has a `GCPProductCategorySpatialStylus` category.

Use the `input` property to get the input profile of the stylus. A spatial stylus includes a pressure sensitive tip and an input cluster composed of two buttons.

- The primary button (`GCInputStylusPrimaryButton`) is the front button (closest to the stylus tip) in the input cluster of the stylus. This button is frequently used grab virtual objects.
- The secondary button (`GCInputStylusSecondaryButton`) is the middle button in the input cluster. It can measures pressure/force levels. It's intended to be used for controlling in-air drawing, selection, and generic interactions.
- The tip is also represented as a button (`GCInputStylusTip`).

```
guard let input = stylus.input else { return }
input.inputStateQueueDepth = 20
input.inputStateAvailableHandler = { input in
    // This block will be enqueued for execution when the state of
    // any stylus input changes.

    // Iterate through all input state changes since last execution of
    // the block.
    while let nextState = input.nextInputState() {
        // Use the value of `pressedInput.isPressed` for binary
        // interactions, such as object selection.
        let primaryButtonPressed = nextState.buttons[.stylusPrimaryButton]?.pressed
        let secondaryButtonPressed = nextState.buttons[.stylusSecondaryButton]?.pres
        // Use the normalized press value for analog actions such as
        // controlling virtual ink flow.
        let secondaryButtonPressure = nextState.buttons[.stylusSecondaryButton]?.pre
        let tipPressure = nextState.buttons[.stylusTip]?.pressedInput.value

        ...
    }
}
```

Use the `haptics` property to get the haptics profile of the stylus. A spatial stylus may optionally support haptic feedback to a single locality - `GCHapticsLocalityDefault`.

# Topics

## Accessing the stylus

```
class var stylus: [GCStylus]
```

Get the collection of stylus accessories currently connected to the device.

## Getting input values and haptics

```
var input: (any GCDevicePhysicalInput)?
```

Gets the input profile for the stylus.

```
var haptics: GCDeviceHaptics?
```

Gets the haptics profile for the stylus, if supported.

## Retrieving the buttons

```
var GCInputStylusPrimaryButton: String
```

```
var GCInputStylusSecondaryButton: String
```

```
var GCInputStylusTip: String
```

## Structures

```
struct DidConnectMessage
```

A message that posts after a stylus accessory connects to the device.

```
struct DidDisconnectMessage
```

A message that posts after a stylus accessory disconnects from the device.

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## Relationships

### Inherits From

NSObject

## Conforms To

CVarArg  
CustomDebugStringConvertible  
CustomStringConvertible  
Equatable  
GCDevice  
Hashable  
NSObjectProtocol

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## See Also

### Game controllers

#### { } Supporting Game Controllers

Support a physical controller or add a virtual controller to enhance how people interact with your game through haptics, lighting, and motion sensing.

- 📄 Letting players use their second-generation Siri Remote as a game controller
  - Support the second-generation Siri Remote as a game controller in your Apple TV game.
- 📄 Discovering and tracking spatial game controllers and stylis
  - Receive controller and stylus input to interact with content in your augmented reality app.

#### protocol GCDevice

A protocol that defines a common interface for game input devices.

#### class GCController

A representation of a real game controller, a virtual controller, or a snapshot of a controller.

#### class GCRacingWheel

An object that represents a physical racing wheel controller connected to a device.

#### class GCKeyboard

An object that represents a physical keyboard connected to a device.

#### class GCMouse

An object that represents a physical mouse connected to a device.