

[SwiftUI](#) / Slider

## Structure

# Slider

A control for selecting a value from a bounded linear range of values.

iOS 13.0+ | iPadOS 13.0+ | Mac Catalyst 13.0+ | macOS 10.15+ | visionOS 1.0+ | watchOS 6.0+

```
struct Slider<Label, ValueLabel> where Label : View, ValueLabel : View
```

## Mentioned in

 [Populating SwiftUI menus with adaptive controls](#)

## Overview

A slider consists of a “thumb” image that the user moves between two extremes of a linear “track”. The ends of the track represent the minimum and maximum possible values. As the user moves the thumb, the slider updates its bound value.

The following example shows a slider bound to the value `speed`. As the slider updates this value, a bound `Text` view shows the value updating. The `onEditingChanged` closure passed to the slider receives callbacks when the user drags the slider. The example uses this to change the color of the value text.

```
@State private var speed = 50.0
@State private var isEditing = false

var body: some View {
    VStack {
        Slider(
            value: $speed,
```

```

        in: 0...100,
        onChanged: { editing in
            isEditing = editing
        }
    )
    Text("\(speed)")
        .foregroundColor(isEditing ? .red : .blue)
}

```



You can also use a step parameter to provide incremental steps along the path of the slider. For example, if you have a slider with a range of 0 to 100, and you set the step value to 5, the slider's increments would be 0, 5, 10, and so on. The following example shows this approach, and also adds optional minimum and maximum value labels.

```

@State private var speed = 50.0
@State private var isEditing = false

var body: some View {
    Slider(
        value: $speed,
        in: 0...100,
        step: 5
    ) {
        Text("Speed")
    } minimumValueLabel: {
        Text("0")
    } maximumValueLabel: {
        Text("100")
    } onChanged: { editing in
        isEditing = editing
    }
    Text("\(speed)")
        .foregroundColor(isEditing ? .red : .blue)
}

```



The slider also uses the `step` to increase or decrease the value when a VoiceOver user adjusts the slider with voice commands.

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## Topics

### Creating a slider

```
init<V>(value: Binding<V>, in: ClosedRange<V>, onEditingChanged: (Bool) -> Void)
```

Creates a slider to select a value from a given range.

```
init<V>(value: Binding<V>, in: ClosedRange<V>, step: V.Stride, onEditingChanged: (Bool) -> Void)
```

Creates a slider to select a value from a given range, subject to a step increment.

### Creating a slider with labels

```
init<V>(value: Binding<V>, in: ClosedRange<V>, label: () -> Label, onEditingChanged: (Bool) -> Void)
```

Creates a slider to select a value from a given range, which displays the provided label.

```
init<V>(value: Binding<V>, in: ClosedRange<V>, step: V.Stride, label: () -> Label, onEditingChanged: (Bool) -> Void)
```

Creates a slider to select a value from a given range, subject to a step increment, which displays the provided label.

```
init<V>(value: Binding<V>, in: ClosedRange<V>, label: () -> Label, minimumValueLabel: () -> ValueLabel, maximumValueLabel: () -> ValueLabel, onEditingChanged: (Bool) -> Void)
```

Creates a slider to select a value from a given range, which displays the provided labels.

```
init<V>(value: Binding<V>, in: ClosedRange<V>, step: V.Stride, label: () -> Label, minimumValueLabel: () -> ValueLabel, maximumValueLabel: () -> ValueLabel, onEditingChanged: (Bool) -> Void)
```

Creates a slider to select a value from a given range, subject to a step increment, which displays the provided labels.

## Adding ticks to a slider

`struct SliderTick`

A representation of a tick in a slider, with associated value and optional label.

`struct SliderTickBuilder`

A result builder that constructs `SliderTicks` for use when creating a `Slider`.

`struct SliderTickContentForEach`

A type of slider content that creates content by iterating over a collection.

`struct TupleSliderTickContent`

Slider content created from a Swift tuple of slider content.

`protocol SliderTickContent`

A type that provides content for a `SliderTickBuilder`.

## Deprecated initializers

~~`init<V>(value: Binding<V>, in: ClosedRange<V>, onEditingChanged: (Bool) → Void, label: () → Label)`~~

Creates a slider to select a value from a given range, which displays the provided label.

Deprecated

~~`init<V>(value: Binding<V>, in: ClosedRange<V>, step: V.Stride, onEditingChanged: (Bool) → Void, label: () → Label)`~~

Creates a slider to select a value from a given range, subject to a step increment, which displays the provided label.

Deprecated

~~`init<V>(value: Binding<V>, in: ClosedRange<V>, onEditingChanged: (Bool) → Void, minimumValueLabel: ValueLabel, maximumValueLabel: ValueLabel, label: () → Label)`~~

Creates a slider to select a value from a given range, which displays the provided labels.

Deprecated

~~`init<V>(value: Binding<V>, in: ClosedRange<V>, step: V.Stride, onEditingChanged: (Bool) -> Void, minimumValueLabel: ValueLabel, maximumValueLabel: ValueLabel, label: () -> Label)`~~

Creates a slider to select a value from a given range, subject to a step increment, which displays the provided labels.

Deprecated

## Initializers

`init<V>(value: Binding<V>, in: ClosedRange<V>, neutralValue: V?, enabledBounds: ClosedRange<V>?, label: () -> Label, currentValueLabel: () -> some View, minimumValueLabel: () -> ValueLabel, maximumValueLabel: () -> ValueLabel, onEditingChanged: (Bool) -> Void)`

Creates a slider to select a value from a given range, which displays the provided labels.

`init<V>(value: Binding<V>, in: ClosedRange<V>, neutralValue: V?, enabledBounds: ClosedRange<V>?, label: () -> Label, currentValueLabel: () -> some View, minimumValueLabel: () -> ValueLabel, maximumValueLabel: () -> ValueLabel, ticks: () -> some SliderTickContent, onEditingChanged: (Bool) -> Void)`

Creates a slider to select a value from a given range, which displays the provided labels and customized ticks.

`init<V>(value: Binding<V>, in: ClosedRange<V>, step: V.Stride, neutralValue: V?, enabledBounds: ClosedRange<V>?, label: () -> Label, currentValueLabel: () -> some View, minimumValueLabel: () -> ValueLabel, maximumValueLabel: () -> ValueLabel, tick: (V) -> SliderTick<V>?, onEditingChanged: (Bool) -> Void)`

Creates a slider to select a value from a given range, subject to a step increment, which displays the provided labels and customizable ticks.

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## Relationships

### Conforms To

View

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# See Also

## Getting numeric inputs

`struct Stepper`

A control that performs increment and decrement actions.

`struct Toggle`

A control that toggles between on and off states.

`func toggleStyle<S>(S) -> some View`

Sets the style for toggles in a view hierarchy.