

[HealthKitUI](#) / HKActivityRingView

Class

HKActivityRingView

A view that uses the Move, Exercise, and Stand activity rings to display data from a HealthKit activity summary object.

iOS 9.3+ | iPadOS 9.3+ | Mac Catalyst 13.0+ | visionOS 1.0+

```
@MainActor
class HKActivityRingView
```

Mentioned in

 [Executing Activity Summary Queries](#)

Overview

Use [HKActivityRingView](#) to display data from an [HKActivitySummary](#) object. For example, the following image shows how the rings can display a summary view of a person's activity.



To display activity summary data from the HealthKit store, use an [HKActivitySummaryQuery](#) object. You can also instantiate and display your own [HKActivitySummary](#) objects, as needed.

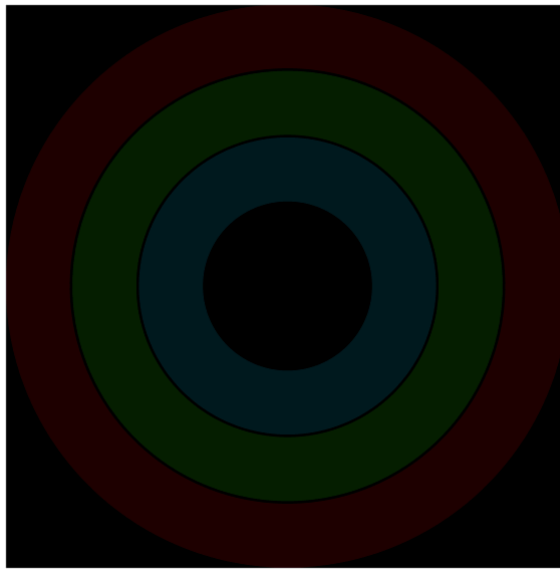
The activity ring view always appears as a black rectangle with colored concentric rings. The rings are centered in the view and are sized to fit the available space.



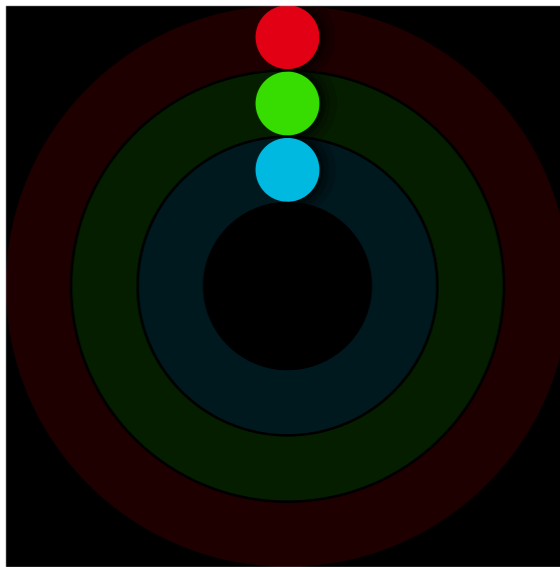
The activity ring view displays different rings depending on the properties defined in the ring view's [HKActivitySummary](#) property. When the view's [HKActivitySummary](#) has [activity](#) [MoveMode](#) set to [appleMoveTime](#) and nil values for [appleExerciseTimeGoal](#) and [appleStandHoursGoal](#) the ring only displays the red Move ring. Otherwise, it displays the Move, Exercise, and Stand activity as red, green, and blue concentric rings. Summary data from the HealthKit store only displays the Move ring when the person hasn't paired an Apple Watch.

The rings can display as either empty or with a dot at the top of the ring to display a lack of data. Empty rings indicate that the activity summary is missing, and a dot at the top indicates that the activity summary's values are set to zero.

If the ring has a nil-valued [activitySummary](#) quantity properties, the rings appear empty. Use this to indicate that there is no summary data available for the specified day. For example, dates in the future.



If the summary has zero-valued quantities set for its value properties, the ring displays a dot at the top of the ring. Use this to indicate that the person hasn't burned any active calories, exercised, or earned any stand hours for the specified day.



To display data for a ring, the `HKActivitySummary` object must have a non-nil quantity for both the corresponding value property and the goal property.

Ring	Value property	Goal property
Move	<u>activeEnergyBurned</u>	<u>activeEnergyBurnedGoal</u>
Exercise	<u>appleExerciseTime</u>	<u>appleExerciseTimeGoal</u>
Stand	<u>appleStandHours</u>	<u>appleStandHoursGoal</u>

Move only ring properties:

Ring	Value property	Goal property
Move	<u>appleMoveTime</u> <u>activeEnergyBurned</u>	<u>appleMoveTimeGoal</u> <u>activeEnergyBurnedGoal</u>

The activity ring view colors a percentage of each ring based on these properties, as shown here:

```
ring percent = value property quantity / goal property quantity
```



The following code snippet shows how to manually display only the Move ring:

```
let moveOnlySummary = HKActivitySummary()
moveOnlySummary.activityMoveMode = .appleMoveTime
moveOnlySummary.appleMoveTime = HKQuantity(unit: .minute(), doubleValue: 60.0)
moveOnlySummary.appleMoveTimeGoal = HKQuantity(unit: .minute(), doubleValue: 90.0)
```

Topics

Setting the activity summary

```
var activitySummary: HKActivitySummary?
```

The active summary displayed by the activity ring view.

```
func setActivitySummary(HKActivitySummary?, animated: Bool)
```

Sets the activity summary displayed by the activity ring view.

Relationships

Inherits From

UIView

Conforms To

CALayerDelegate
CVarArg
CustomDebugStringConvertible
CustomStringConvertible
Equatable
Hashable
NSCoding
NSObjectProtocol
NSTouchBarProvider
UIAccessibilityIdentification
UIActivityItemsConfigurationProviding
UIAppearance
UIAppearanceContainer
UICoordinateSpace
UIDynamicItem
UIFocusEnvironment
UIFocusItem
UIFocusItemContainer
UILargeContentViewerItem
UIPasteConfigurationSupporting
UIPopoverPresentationControllerSourceItem
UIResponderStandardEditActions
UITraitChangeObservable
UITraitEnvironment
UIUserActivityRestoring

See Also

Essentials



HealthKit

Access and share health and fitness data while maintaining the user's privacy and control.