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API Collection

Polar-rectangular conversion

Convert each element of a vector between radius-angle and Cartesian pairs.

Topics

Converting polar coordinates to rectangular coordinates

```
static func polarToRectangular<U>(U) -> [Float]
```

Returns single-precision rectangular coordinates converted from polar coordinates.

```
static func polarToRectangular<U>(U) -> [Double]
```

Returns double-precision rectangular coordinates converted from polar coordinates.

```
static func convert<U, V>(polarCoordinates: U, toRectangularCoordinates  
: inout V)
```

Converts single-precision polar coordinates to rectangular coordinates.

```
static func convert<U, V>(polarCoordinates: U, toRectangularCoordinates  
: inout V)
```

Converts double-precision polar coordinates to rectangular coordinates.

vDSP_rect

Converts single-precision polar coordinates to rectangular coordinates, using the specified stride.

vDSP_rectD

Converts double-precision polar coordinates to rectangular coordinates, using the specified stride.

Converting rectangular coordinates to polar coordinates

```
static func rectangularToPolar<U>(U) -> [Float]
```

Returns single-precision polar coordinates converted from rectangular coordinates.

```
static func rectangularToPolar<U>(U) -> [Double]
```

Returns double-precision polar coordinates converted from rectangular coordinates.

```
static func convert<U, V>(rectangularCoordinates: U, toPolarCoordinates  
: inout V)
```

Converts single-precision rectangular coordinates to polar coordinates.

```
static func convert<U, V>(rectangularCoordinates: U, toPolarCoordinates  
: inout V)
```

Converts double-precision rectangular coordinates to polar coordinates.

`vDSP_polar`

Converts single-precision rectangular coordinates to polar coordinates, using the specified stride.

`vDSP_polarD`

Converts double-precision rectangular coordinates to polar coordinates, using the specified stride.

See Also

Vector conversion functions

⌵ Conversion to decibel equivalents

Convert vectors that contain power or amplitude data to decibels.

⌵ Type conversion

Perform element-wise floating-point to integer and integer to floating-point conversion.

⌵ Complex vector conversion

Perform element-wise split-complex to interleaved and interleaved to split-complex conversion.