

# Package ‘normalizeH’

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**Title** Normalize Hadamard Matrix

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**Depends** R (>= 4.2.0)

**Suggests** HadamardR

**Description** Normalize a given Hadamard matrix. A Hadamard matrix is said to be normalized when its first row and first column entries are all 1, see Hedayat, A. and Wallis, W. D. (1978) ``Hadamard matrices and their applications. The Annals of Statistics, 1184-1238." <doi:10.1214/aos/1176344370>.

**License** GPL (>= 2)

**NeedsCompilation** no

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normalizeH	<i>Normalized Hadamard Matrix</i>
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### Description

Converts a given Hadamard matrix to its normalized form

### Usage

```
normalizeH(H)
```

**Arguments**

H                    A Hadamard matrix

**Value**

A normalize Hadamard matrix of same dimension as the input matrix.

**Author(s)**

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**Examples**

```
H = matrix(c(1,1,1,-1),nrow = 2)
normalizeH(H)
```

```
require(HadamardR)
h8 <- Hadamard_Matrix(8)
normalizeH(h8)
```

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