

## Contents

[M-5] Manual entry	Function	Purpose
<b>Transposition</b>		
<b>transposeonly()</b>	transposeonly()	transposition without conjugation
<b>_transpose()</b>	_transpose()	transposition in place
<b>Diagonals</b>		
<b>diag()</b>	diag()	create diagonal matrix from vector
<b>_diag()</b>	_diag()	replace diagonal of matrix
<b>diagonal()</b>	diagonal()	extract diagonal of matrix into vector
<b>Triangular &amp; symmetric</b>		
<b>lowertriangle()</b>	lowertriangle()	extract lower triangle
	uppertriangle()	extract upper triangle
<b>sublowertriangle()</b>	sublowertriangle()	generalized lowertriangle()
<b>makesymmetric()</b>	makesymmetric()	make matrix symmetric (Hermitian)
<b>Sorting</b>		
<b>sort()</b>	sort() jumble() order() unorder() _collate()	sort rows of matrix randomize order of rows of matrix permutation vector for ordered rows permutation vector for randomized rows order matrix on permutation vector
<b>uniqrows()</b>	uniqrows()	sorted, unique rows

Editing

<code>_fillmissing()</code>	<code>_fillmissing()</code>	change matrix to contain missing values
<code>editmissing()</code>	<code>editmissing()</code>	replace missing values in matrix
<code>editvalue()</code>	<code>editvalue()</code>	replace values in matrix
<code>edittozero()</code>	<code>edittozero()</code> <code>edittozerotol()</code>	edit matrix for roundoff error (zeros) same, absolute tolerance
<code>edittoint()</code>	<code>edittoint()</code> <code>edittointtol()</code>	edit matrix for roundoff error (integers) same, absolute tolerance

Permutation vectors

<code>invorder()</code>	<code>invorder()</code> <code>revorder()</code>	inverse of permutation vector reverse of permutation vector
-------------------------	--	--

Matrices into vectors & vice versa

<code>vec()</code>	<code>vec()</code> <code>vech()</code> <code>invvech()</code>	convert matrix into column vector convert symmetric matrix into column vector convert column vector into symmetric matrix
<code>rowshape()</code>	<code>rowshape()</code> <code>colshape()</code>	reshape matrix to have $r$ rows reshape matrix to have $c$ columns

Associative arrays

<code>asarray()</code>	<code>asarray()</code> <code>asarray_*</code>	store or retrieve element in array utility routines
------------------------	--	--

## Description

The above functions manipulate matrices, such as extracting the diagonal and sorting.

## Remarks and examples

There is a thin line between manipulation and utility; also see

[M-4] [Utility](#)     Matrix utility functions

## Also see

[M-4] [Intro](#) — Categorical guide to Mata functions

Stata, Stata Press, Mata, NetCourse, and NetCourseNow are registered trademarks of StataCorp LLC. Stata and Stata Press are registered trademarks with the World Intellectual Property Organization of the United Nations. StataNow is a trademark of StataCorp LLC. Other brand and product names are registered trademarks or trademarks of their respective companies. Copyright © 1985–2025 StataCorp LLC, College Station, TX, USA. All rights reserved.



For suggested citations, see the FAQ on [citing Stata documentation](#).