R Graphics Cheatsheet

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Base Package Graphics

par

For colors, see 'Color Specification' below
RO = Read Only; PO = set only by calling 'par()'
NDC = Normalized Device Coordinates

`adj`	0=left, 0.5=center, 1=right-justified
`ann`	FALSE=no annotation
`bg`	background color
`bty`	box around plots: characters o,1,7,c,u,j,n
`cex`	amount to magnify text and symbols
`cex.axis`	amount to magnify axis annotation relative to cex
`cex.lab`	amount to magnify x & y labels relative to cex
`cex.main`	amount to magnify main titles relative to cex
`cex.sub`	amount to magnify main sub-titles relative to cex
`cin`	character size in inches (='cra' with different units) RO
`col`	default plotting color
`col.axis`	color for axis annotation
`col.lab`	color for x & y labels
`col.main`	color for main titles
`col.sub`	color for sub-titles
`cra`	character size in raster units (pixels) RO
`crt`	character rotation in degrees (see 'srt' for strings)
`csi`	character height (size) in inches (=cin[2]) RO
`cxy`	character size (width, height) in user coordinates (par("cxy")=par("cin")/par("pin") scaled to user coords). RO [strwidth() & strheight() are more precise]
`din`	device dimensions (width, height) in inches RO
`err`	degree of error reporting desired [unimplemented]
`family`	name of font family
`fg`	foreground color
`fig` (PO)	figure region in the display region of the device in NDC; numerical vector c(x1, x2, y1, y2). To add to an existing plot, use new=TRUE.
`fin` (PO)	figure region dimensions (width, height) in inches. Starts a new plot.
`font`	an integer which specifies which font to use. 1 plain; 2 bold; 3 itialic; 4 bold italic; 5 Symbol font.
`font.axis`	font for axis annotation
`font.lab`	font for x & y labels
`font.main`	font for main titles
`font.sub`	font for sub-titles
`lab`	axis style: 0 parallel; 1 horizontal; 2 perpendicular; 3 vertical
`lend`	line end style, integer or string: 0 or "round""; 1 or "butt""; 2 or "square""
`lheight` (PO)	line height multiplier
`ljoin`	line join style, integer or string: 0 or "round""; 1 or "mitre""; 2 or "bevel"
`lmitre`	line mitre limit (larger than 1; default 10)
`lty`	line type, integer or string: 0 "blank"; 1 "solid"; 2 "dashed"; 3 "dotted"; 4 "dotdash"; 5 "longdash"; 6 "twodash"
`lwd`	line width; default 1
`mai` (PO)	margin size in inches; numerical vector c(bottom, left, top, right)
`mar` (PO)	margin size in lines; numerical vector c(bottom, left, top, right); default is c(5,4,4,2)+0.1
`mex` (PO)	character size expansion factor used to describe coordinates in the margins of plots
`mfcol`	number of cols and rows in an array of plots; numerical vector c(nr,nc); try alternatives layout() or split.screen()
`mfrow` (PO)	
`mfg` (PO)	which figure in an array of figures is being drawn (query) or is to be drawn (set); numerical vector c(i,j); the array must have already been set with mfcol and/or mfrow
`mgp`	margin line (in `mex` units) for the axis title, labels and axis line; numeric vector c(mltitle, mlaxislabels, mlaxisline)
`new` (PO)	if TRUE, don't clean the frame; if FALSE (default), clean the frame before drawing; a warning is issued of the device does not already contain a high-level plot
`oma` (PO)	outer margins in lines of text; numeric vector c(bottom, left, top, right)
`omd` (PO)	region inside outer margins in NDC; numeric vector c(x1,x2,y1,y2)
`omi` (PO)	outer margin size in inches; numeric vector c(x1, x2, y1, y2)
`page`	boolean indicating if the next call to plot.new() will start a new page. May be FALSE with multiple figures on the page. RO
`pch`	integer specifying a symbol or a character to be used as the default symbol for plotting points.
`pin` (PO)	plot dimensions in inches; numeric vector c(width, height)
`plt` (PO)	coordinates of the plot region as fractions of the current figure region; numeric vector c(x1, x2, y1, y2)
`ps` (PO)	point size of text (not of point symbols), usually in 1/72 of an inch; integer
`pty` (PO)	plot region type; character: "s" square plot; "m" maximal plot
`srt`	string rotation in degrees (see `crt`); only supported by `text()`
`tck`	tick mark length as a fraction of the smaller of width or height of plotting region; tck=1 draws grid lines; tck=NA (default) ⇒ tcl=-0.5
`tcl`	tick mark length as a fraction of the height of a line of text; default -0.5; tcl=NA ⇒ tck=-0.01
`usr` (PO)	extremes of the user coordinates of the plotting region; numeric vector c(x1, x2, y1, y2); for log scales, x-limits will be 10 ^ par("usr")[1:2] (y-limits will be [3:4])
`xaxp`	non-log scale: extreme tick-marks and number of intervals log scale: lowest and highest power of 10 inside the user coordinates and n=1 marks at 10 ^ j for integerj; n=2 marks at k 10 ^ j with k in {1,5}; n=3 marks at 10 ^ j with k in {1,2,5} numeric vector c(x1, x2, n)
`xaxs`	style of x-axis interval calculation: "r" regular; "i" internal
`xaxt`	x-axis type; "n" no axis plotting; "s" standard
`xlog` (PO)	x-axis log scale boolean
`xpd`	plot clipping: FALSE plot region; TRUE figure region; NA device region
`yaxp`	non-log scale: extreme tick-marks and number of intervals log scale: see `xaxp` above numeric vector c(y1, y2, n)
`yaxs`	style of y-axis interval calculation: "r" regular; "i" internal
`yaxt`	y-axis type; "n" no axis plotting; "s" standard
`ylbias` (PO)	used in the positioning of text in the margins by `axis()` and `mtext()`; set to 0.2
`ylog` (PO)	y-axis log scale boolean

Base Package Plotting Functions

`text(x, y=NULL,labels=seq_along(x), adj=NULL, pos=NULL, offset=0.5, vfont=NULL, cex=1, col=NULL, font=NULL,...)`	draws strings in vector labels at pt. x, y
`points(x, y=NULL, type="p", ...)`	get help //

Color Specification

Color