

R Base Graphics Cheatsheet

SET GRAPHICAL PARAMETERS

the following can only be set with par()

par (...)

<i>multiple plots</i>	mfcol = c(nrow,ncol)	<i>plot margins (outer)</i>	oma = c(bottom, left, top, right) default: c(0, 0, 0, 0) lines
<i>plot margins</i>	mar = c(bottom, left, top, right) default: c(5.1, 4.1, 4.1, 2.1) lines	<i>query x & y limits</i>	par ("usr")

CREATE A NEW PLOT

Bar charts	barplot (height, ...)	Histograms	hist (x, ...)
<i>bar labels</i>	names.arg =	<i>breakpts</i>	breaks =
<i>border</i>	border =		
<i>fill color</i>	col =		
<i>horizontal</i>	horiz = TRUE		
Box plots	boxplot (x, ...)	Line charts	plot (x, type = "l")
<i>horizontal</i>	horizontal = TRUE	<i>line type</i>	lty = "blank" 0 "solid" 1 "dashed" 2 "dotted" 3
<i>box labels</i>	names =	<i>line width</i>	lwd =
Dot plots	dotchart (x, ...)	Scatterplots	plot (x, ...)
<i>dot labels</i>	labels =	<i>symbol</i>	pch =

REMOVE

<i>axis labels</i>	ann = FALSE
<i>axis, tickmarks, and labels</i>	xaxt = "n" yaxt = "n"
<i>plot box</i>	bty = "n"

NOTE: Many of the parameters here can be also be set in par(). See R help for more options.

ADJUST

<i>allow plotting out of plot region</i>	xpd = TRUE
<i>aspect ratio</i>	asp =
<i>axis limits</i>	xlim =, ylim =
<i>axis lines to match axis limits</i>	xaxs = "i", yaxs = "i" (internal axis calculation)

ADD TEXT

location

<i>axis labels</i>	xlab =, ylab =
<i>subtitle</i>	sub =
<i>title</i>	main =

style

<i>font face</i>	font = 1 (plain) 2 (bold) 3 (italic) 4 (bold italic)
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font family

family = "serif" "sans" "mono"

size

(magnification factor)

<i>all elements</i>	cex =
<i>axis labels</i>	cex.lab =
<i>subtitle</i>	cex.sub =
<i>tick mark labels</i>	cex.axis =
<i>title</i>	cex.main =

position

<i>text direction</i>	las = 1 (horizontal)
<i>justification</i>	adj = 0 .5 1 (left, center, right)

ADD TO AN EXISTING PLOT

Add new plot [*any plot function*]
(..., add = TRUE)
ex. barplot(x, add = TRUE)

Axes

axis (side,...)

<i>location</i>	side = 1 2 3 4 (bottom, left, top, right)
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tick mark:

<i>labels</i>	labels =
<i>location</i>	at =
<i>remove</i>	tick = FALSE
<i>rotate text</i>	las = 1 (horizontal)

Axis labels

mtext (text,...)

<i>location</i>	side = 1 2 3 4 (bottom, left, top, right)
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lines to skip

line = (from plot region, default = 0)

position

at = x or y-coord
(depending on side)

justification

adj = 0 .5 1
(left, center, right)


Lines

lines (x,...)

<i>line style</i>	lty =
<i>line width</i>	lwd =
<i>color</i>	col =

Points

points (x,...)

<i>symbol</i>	pch =
	
<i>color</i>	col =
<i>fill color</i>	bg = (pch: 21-25 only)

Text

text (x, y, text,...)

<i>position (rel. to x,y)</i>	pos = 1 2 3 4 (below, left, above, right) (default=center)
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Title

title (main,...)

<i>axis labels</i>	xlab =, ylab =
<i>subtitle</i>	sub =
<i>title</i>	main =