

## SPIKE LINE

### PURPOSE

Specifies the line patterns used to draw spikes on subsequent plots. See the Graphics Attributes chapter for a list of available line styles.

### DESCRIPTION

A spike is a vertical line from the plot point to the spike base (most typically the x axis). Spikes are specified by trace. That is, all points belonging to the same trace are drawn with the same spike attributes.

### SYNTAX

SPIKE LINE <type> <type> <type> etc.

where <type> is a character string that specifies the desired line type. Up to 100 spike line types can be specified.

### EXAMPLES

SPIKE LINE SOLID DASH DOT

SPIKE LINE SOLID ALL

SPIKE LINE ALL SOLID

SPIKE LINE

### NOTE

The SPIKE LINE command with no arguments sets the spike type to solid for all traces. The SPIKE LINE command with the word ALL before or after the specified type assigns that pattern line type to all traces; thus SPIKE LINE SOLID ALL or SPIKE LINE ALL SOLID plots spike patterns with solid lines for all traces.

### DEFAULT

All spikes are drawn with solid lines.

### SYNONYMS

SPIKE PATTERN

### RELATED COMMANDS

PLOT	=	Generates a data or function plot.
SPIKE	=	Sets the on/off switches for plot spikes.
SPIKE BASE	=	Sets the base locations for plot spikes.
SPIKE COLOR	=	Sets the colors for plot spikes.
SPIKE DIRECTION	=	Sets the directions for plot spikes.
SPIKE THICKNESS	=	Sets the line thicknesses for plot spikes.

### REFERENCES

“Elements of Graphing Data,” William S. Cleveland, Wadsworth Advanced Books and Software, 1985.

“Visualizing Data,” William S. Cleveland, Hobart Press, 1993.

### APPLICATIONS

Presentation graphics, time series plots, dot charts

### IMPLEMENTATION DATE

Pre-1987

PROGRAM

```

LET CARTER = DATA 66 30 11 43 44 41 35 82 54 36
LET REAGAN = DATA 26 54 84 47 51 51 52 14 36 55
LET X = DATA 1 2 3 5 6 7 8 10 11 12
.
TIC MARK LABEL FORMAT ALPHA
YLIMITS 1 12; YTIC OFFSET 1 1
YITIC LABEL CONTENT DEMOCRATS INDEPENDENTS REPUBLICANS SP() ...
    EAST SOUTH MIDWEST WEST SP() BLACKS HISPANICS WHITES SP()
MINOR YITIC MARK NUMBER 0
XILABEL PERCENT; XLIMITS -100 100
MAJOR XTIC MARK NUMBER 11; MINOR XTIC MARK NUMBER 1
XTIC MARK LABEL CONTENT 100 80 60 40 20 0 20 40 60 80 100
.
LINE BLANK BLANK SOLID
CHARACTER CIRCLE CIRCLE
CHARACTER FILL ON ON
CHARACTER HW 1 0.75 ALL
SPIKE ON ON OFF
SPIKE DIRECTION H ALL
SPIKE LINE DASH DASH
TITLE DEMONSTRATE SPIKE LINE COMMAND; TITLE SIZE 5
LEGEND 1 CARTER; LEGEND 1 COORDINATES 17 85
LEGEND 2 REAGAN; LEGEND 2 COORDINATES 83 85; LEGEND 2 JUST RIGHT
.
LET CART2 = -CARTER
LET XJUNK = DATA 0.5 12.5; LET YJUNK = DATA 0 0
PLOT X VS REAGAN AND
PLOT X VS CART2 AND
PLOT XJUNK YJUNK
    
```

