**... TIC MARK LABEL HW**

**PURPOSE**

Specifies the height and width of characters in the tic mark labels on subsequent plots.

**DESCRIPTION**

The height is specified in vertical DATAPLOT 0 to 100 units and the width is specified in horizontal DATAPLOT 0 to 100 units. The tic mark label hw’s hold for all subsequent plots until defaulted (via the TIC MARK LABEL HW command with no arguments) or overridden with a new tic mark label hw command (or a tic label size command).

**SYNTAX**

```
<prefix>TIC MARK LABEL HW <height> <width>
```

where `<prefix>` is one of the following:

- X1 refers to the bottom horizontal side;
- X2 refers to the top horizontal side;
- X refers to both horizontal sides;
- Y1 refers to the left vertical side;
- Y2 refers to the right vertical side;
- Y refers to both vertical sides;
- no prefix refers to all 4 sides;

`<height>` is a number or parameter in the range 0 to 100 that specifies the desired height;

and `<width>` is a number or parameter in the range 0 to 100 that specifies the desired width.

**EXAMPLES**

```
TIC MARK LABEL HW
YTIC MARK LABEL HW 5 3
```

**NOTE 1**

This command is most typically used to correct distortions in character height to width ratios caused by MULTI PLOT commands with an unequal number of rows and columns.

**NOTE 2**

Hardware characters typically only allow the height to be set (and the width is a fixed percentage of the height). For hardware characters, a TIC LABEL HW <height> <width> is equivalent to a TIC LABEL SIZE <height> command (i.e., the width parameter is ignored).

**NOTE 3**

A ...TIC MARK LABEL HW command with no arguments reverts the setting to default; thus X1TIC MARK LABEL HW with no arguments reverts the bottom horizontal tic label sizes to default. A ...TIC MARK LABEL HW command with no prefix refers to all 4 sides; thus TIC MARK LABEL HW 1 0.75 sets tic mark label heights and widths to 1 and 0.75 respectively for all 4 frame lines. TIC MARK LABEL HW with no prefix and no arguments reverts the tic label hw settings on all 4 sides to default.

**DEFAULT**

Tic mark label heights and widths are 1.5 and 0.75 respectively.

**SYNONYMS**

TIC LABEL HW, TICS LABEL HW, and TICS MARK LABEL HW are synonyms for TIC MARK LABEL HW, as in TIC LABEL HW 1.5 1.0 and X2TIC LABEL HW 1.7 1.0.

**RELATED COMMANDS**

- TIC MARK LABEL = Specifies whether or not tic mark labels or drawn.
- TIC MARK LABEL ANGLE = Sets the angle for tic labels.
- TIC MARK LABEL CASE = Sets case for tic labels.
- TIC MARK LABEL CONTENTS = Specify alphanumeric values for tic labels.
- TIC MARK LABEL DIRECTION = Sets the direction (horizontal/ vertical) for TIC MARK labels.
- TIC MARK LABEL FONT = Sets the font for tic labels.
- TIC MARK LABEL FORMAT = Sets the format (alphanumeric, power of 10, exponential) for tic labels.
- TIC MARK LABEL JUSTIFICATION = Sets the justification for tic labels.
TIC MARK LABEL SIZE = Sets the height for tic labels.

APPLICATIONS
MULTIPLICATION command, presentation graphics

IMPLEMENTATION DATE
88/2

PROGRAM
LET Y = DATA 392 341 307 203 115 59 38 32 29 28
LET N = NUMBER Y
LET X = SEQUENCE 1 1 N
LINES BLANK ALL
BAR ON ALL
BAR WIDTH 0.5 ALL
BAR DIMENSION 3 ALL
BAR FILL ONTS ALL
XLIMITS 1 10
XTIC OFFSET 1 1
YLIMTS 0 500
MAJOR XTIC MARK NUMBER 10
MINOR XTIC MARK NUMBER 0
XTIC MARK LABEL FORMAT ALPHA
XTIC MARK LABEL CONTENT APOLLO SUN HP DEC SYM SGI IBM DG TI XEROX
TIC MARK LABEL FONT DUPLEX
TIC MARK LABEL HW 1.5 0.9
LEGEND 1 PRESENTATION GRAPHICS
LEGEND 2 3-D BAR HISTOGRAM
TITLE DEMONSTRATE TIC LABEL HW; TITLE SIZE 5
PLOT Y X X

DEMONSTRATE TIC LABEL HW

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4-288 March 17, 1997 DATAPLOT Reference Manual