... TIC MARK LABEL DIRECTION

PURPOSE
Specifies the direction of the labels associated with the major tic marks on subsequent plots.

SYNTAX
<pre>prefix>TIC MARK LABEL DIRECTION <HORIZONTAL or VERTICAL>
</pre>
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;

and HORIZONTAL specifies that the text is drawn horizontally while VERTICAL specifies that the text is drawn vertically.

EXAMPLES

TIC MARK LABEL DIRECTION VERTICAL
X2TIC MARK LABEL DIRECTION VERTICAL
Y2TIC MARK LABEL DIRECTION VERTICAL

NOTE 1
This command applies for tic labels drawn with a hardware font. If the tic label is drawn with a software font, use the TIC LABEL ANGLE command. Some devices (e.g., Postscript, HP-GL) can rotate hardware characters while other devices (e.g., X11) cannot. DATAPLOT will draw vertical strings rotated 90 degrees on those devices that can rotate hardware characters. Otherwise, it draws them as a column of single horizontal characters. At this time, it does not support directions other than horizontal and vertical even for devices such as Postscript that allow arbitrary rotation angles for hardware text. If you wish to use an arbitrary angle, use the TIC MARK LABEL FONT and TIC MARK LABEL ANGLE commands.

NOTE 2
The most common use of this command is to print the vertical axis tic labels vertically (YTIC LABEL DIRECTION VERTICAL). It is also occasionally used to print horizontal alphanumeric labels vertically to avoid overlap.

NOTE 3
A ...TIC MARK LABEL DIRECTION command with no arguments reverts the setting to default; thus X1TIC MARK LABEL DIRECTION with no arguments reverts the bottom horizontal tic label direction to horizontal. A ...TIC MARK LABEL DIRECTION command with no prefix refers to all 4 sides; thus TIC MARK LABEL DIRECTION VERTICAL sets tic mark labels to vertical for all 4 frame lines. TIC MARK LABEL DIRECTION with no prefix and no arguments reverts the tic label direction settings on all 4 sides to default.

DEFAULT
All tic mark labels are drawn horizontally.

SYNONYMS
TIC LABEL DIRECTION, TICS LABEL DIRECTION, and TICS MARK LABEL DIRECTION are synonyms for TIC MARK LABEL DIRECTION, as in TIC LABEL DIRECTION VERT and X2TIC LABEL DIRECTION HORIZ.

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 the case for tic labels.
- TIC MARK LABEL CONTENTS = Specify alphanumeric values for tic labels.
- TIC MARK LABEL DISPLACEMENT = Sets the distance between tic labels and the frame.
- 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 HW = Sets the height and width for tic labels.
- TIC MARK LABEL JUSTIFICATION = Sets the justification for tic labels.
**Plot Control Commands**

TIC MARK LABEL SIZE = Sets the height for tic labels.

**APPLICATIONS**
Presentation Graphics

**IMPLEMENTATION DATE**
89/2

**PROGRAM**

```plaintext
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 .5 ALL
BAR DIMENSION 3 ALL; BAR FILL ONTS ALL
XLIMITS 1 10
XTIC OFFSET 1 1
MAJOR XTIC MARK NUMBER 10
MINOR XTIC MARK NUMBER 0
XTIC MARK LABEL FORMAT ALPHA
XTIC MARK LABEL JUSTIFICATION LETO
XTIC MARK SIZE 1.8
XTIC MARK LABEL CONTENT APOLLO SUN HP DEC SYM SGI IBM DG TI XEROX
XTIC MARK LABEL DIRECTION VERTICAL
YLIMITS 0 500
YTIC MARK LABEL JUSTIFICATION CECE
YTIC MARK LABEL DIRECTION VERTICAL
LEGEND 1 PRESENTATION GRAPHICS
LEGEND 2 3-D BAR HISTOGRAM
TITLE DEMONSTRATE TIC LABEL DIRECTION; TITLE SIZE 5
PLOT Y X X
```

**DEMONSTRATE TIC LABEL DIRECTION**

![Graph demonstrating tic mark label direction and other plot control commands](image)