**MAJOR ... TIC MARK NUMBER**

**PURPOSE**

Specifies the number of major tic marks to appear on an axis.

**DESCRIPTION**

DATAPLOT can automatically scale the axis and select an appropriate number of major tic marks. However, it is sometimes desirable to override the default choice and generate your own axis scale specification. This command is normally used with the LIMITS command to generate a “neat” axis scale.

**SYNTAX**

MAJOR <prefix>TIC MARK NUMBER <value>

where <prefix> is one of the following:

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

and <value> is an integer number or parameter that specifies the desired number of major tic marks.

**EXAMPLES**

- MAJOR TIC MARK NUMBER 5
- MAJOR XTIC MARK NUMBER 6
- MAJOR YTIC MARK NUMBER 4
- MAJOR TIC MARK NUMBER

**NOTE**

A MAJOR TIC MARK NUMBER command with no arguments reverts the setting to default; thus MAJOR X1TIC MARK NUMBER with no arguments reverts the bottom horizontal tic labels to on. A MAJOR TIC MARK LABEL command with no prefix refers to all 4 sides; thus MAJOR TIC MARK NUMBER OFF suppresses tic mark label for all 4 frame lines. Note also that MAJOR TIC MARK NUMBER with no prefix and no arguments reverts the tic label settings on all 4 sides to default.

**DEFAULT**

DATAPLOT selects an appropriate number of tic marks.

**SYNONYMS**

MAJOR TIC NUMBER and TIC NUMBER are synonyms for MAJOR TIC MARK NUMBER, as in MAJOR TIC NUMBER 6 and TIC NUMBER 6.

**RELATED COMMANDS**

- MINOR TIC MARK NUMBER = Specifies the number of minor tic mark numbers to appear between major tic marks.
- LIMITS = Specifies the axis minimum and maximum values.
- TIC MARK = Specifies whether or not tics are drawn.
- TIC MARK OFFSET = Sets the offset for the first and last tic marks.

**APPLICATIONS**

- Neat axes

**IMPLEMENTATION DATE**

Pre-1987
PROGRAM

LET LEAD = DATA ...  
   164 426 59 98 312 263 607 497 213 54 160 262 547 325 419 94 70
LET POT = DATA ...  
   106 175 61 79 94 121 424 328 107 218 140 179 246 231 245 339 99

TITLE DEMONSTRATE MAJOR TICS
TITLE SIZE 5
X1LABEL LEAD
Y1LABEL POTASSIUM
CHARACTER CIRCLE
CHARACTER SIZE 1.5
LINE BLANK ALL

XLIMITS 0 600
XTIC OFFSET 0 15
MAJOR XTIC MARK NUMBER 7
YLIMITS 100 400
YTIC OFFSET 50 50
MAJOR YTIC MARK NUMBER 4

PLOT POT VS LEAD