### LEGEND ... DIRECTION

**PURPOSE**

Specifies the direction of the legends to appear on subsequent plots (i.e., horizontal or vertical).

**DESCRIPTION**

The legends are the text which the analyst can position anywhere (via the LEGEND ... COORDINATES command) on a plot. The legends appear on all subsequent plots until blanked out (via a LEGEND command with no arguments) or until overridden with new legends. 100 such legends can be specified. The legend directions hold for all subsequent plots until defaulted (via the LEGEND ... DIRECTION command with no arguments) or until overridden with new legend directions.

**SYNTAX**

```
LEGEND <id> DIRECTION <direction>
```

where `<id>` is an integer number or parameter in the range 1 to 100 that specifies the legend identifier; and `<direction>` is HORIZONTAL for horizontal legends or VERTICAL for vertical legends.

**EXAMPLES**

- `LEGEND 1 DIRECTION VERTICAL`
- `LEGEND 2 DIRECTION HORIZONTAL`
- `LEGEND 1 DIRECTION`
- `LEGEND DIRECTION`

**NOTE 1**

A LEGEND ... DIRECTION command with no direction reverts the direction to default. Thus `LEGEND 1 DIRECTION` with no direction reverts the direction of legend 1 to default. A LEGEND ... DIRECTION command with no `<id>` refers to all 100 legends. Thus `LEGEND DIRECTION VERTICAL` assigns the direction VERTICAL to all 100 legends. LABEL DIRECTION with no `<id>` and no direction reverts all 100 legends to the default direction.

**NOTE 2**

This command only applies if the legend is drawn with hardware characters. The LEGEND ANGLE command can be used to set an arbitrary direction for text strings when the legend is drawn with a software font (e.g., SIMPLEX).

**DEFAULT**

All legend directions are horizontal.

**SYNONYMS**

None

**RELATED COMMANDS**

- `PLOT` = Generates a data or function plot.
- `LEGEND` = Specify the legends for subsequent plots.
- `LEGEND ANGLE` = Sets the plot legend angles.
- `LEGEND CASE` = Sets the plot legend cases.
- `LEGEND COLOR` = Sets the plot legend colors.
- `LEGEND COORDINATES` = Sets the plot legend locations.
- `LEGEND FONT` = Sets the plot legend fonts.
- `LEGEND HW` = Sets the plot legend heights and widths.
- `LEGEND JUSTIFICATION` = Sets the plot legend justifications.
- `LEGEND SIZES` = Sets the plot legend sizes.
- `LEGEND THICKNESS` = Sets the plot legend line thicknesses.

**APPLICATIONS**

Plot labeling and identification, presentation graphics

**IMPLEMENTATION DATE**

89/2
**LEGEND ... DIRECTION**

**Plot Control Commands**

**PROGRAM**

```
LET ID2 = DATA 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2
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
.
CHARACTER X1 X2 Y1 Y2
LINE BLANK ALL
LEGEND 1 X - POTASSIUM
LEGEND 2 Y - LEAD
LEGEND 1 COORDINATES 8 50
LEGEND 2 COORDINATES 4 50
LEGEND 1 DIRECTION VERTICAL
LEGEND 2 DIRECTION VERTICAL
LEGEND 2 JUSTIFICATION CETO
.
TITLE DEMONSTRATE LEGEND DIRECTION COMMAND
TITLE SIZE 5
LET X = SEQUENCE 1 1 1 7
PLOT POT X ID2 AND
PLOT LEAD X ID2
```

**DEMONSTRATE LEGEND DIRECTION COMMAND**

![Graph showing demonstration of legend direction commands](image_url)