ZETA

PURPOSE

Direct graphical output to a Zeta device.

DESCRIPTION

There are a large number of Zeta devices (although most are penplotters or film recorders) models. Zeta typically supports their devices through a software library called the Calcomp library. DATAPLOT supports the various Zeta devices through calls to this library. This library contains a core set of modules that should be common to all Zeta devices. In addition, it may contain a few routines that are specific to that device. DATAPLOT is restricted to using the following routines in this library:

PLOTS
PLOT
NEWPEN
SYMBOL
DASHDF

The Calcomp library controls the disposition of the graphics output. This may be spooling to a tape device or to a disk file. If output is to a disk file, some local procedure may be required to actually send the output to the Zeta device. The details of this are dependent on the local implementation of the Calcomp library. Contact your local Zeta expert for the details on your site. In any event, the Calcomp device does not use DPPL1F.DAT or DPPL2F.DAT as the graphics output file.

SYNTAX 1

ZETA

This form designates device 1 as a Zeta device. Although device 1 is normally reserved for the terminal screen, in the Zeta case the graphics output is typically sent to a file.

SYNTAX 2

DEVICE <1/2/3> ZETA

This form designates one of DATAPLOT's 3 devices (it will typically be device 2) to be a Zeta device.

EXAMPLES

ZETA ON
DEVICE 2 ZETA
DEVICE 3 ZETA

NOTE 1

In order for this command to be operational, the local DATAPLOT installer must link the local Zeta version of the Calcomp library with DATAPLOT. Also, local sites may have code to select different papers, pen types, colors, and other similar things. Contact the local installer if more information is needed about this.

NOTE 2

In order to accommodate different models, two SET commands are available. SET ZETA COLORS <number> identifies the number of colors available on the local ZETA device. SET CALCOMP WIDTH <num> (in DATAPLOT 0 to 100 units) sets the line width for drawing thick lines and fills of solid regions. See the the Color chapter to see the default slot to color mapping DATAPLOT assumes. See the documentation for the PEN MAP command to see how to change this default mapping.

DEFAULT

Device 1 is a Tektronix 4014, device 2 is off, and device 3 is a Postscript printer.

SYNONYMS

None

DEVICE NOTES

1. HARDWARE TEXT - Zeta hardware characters can be scaled to any size. Vertical strings are rotated 90 degrees. The appearance of hardware characters varies depending on the particular model.
2. COLOR - The number of colors varies depending on the particular model you are using. By default, DATAPLOT assumes 8 pen slots. If you have less (or more) than 8, use the command SET ZETA COLORS to specify the number you have. For more than 8 slots, use the ZETA PEN MAP command for slot numbers greater than 8. This command can also be used to override the default color to slot number mapping.
3. HARDWARE FILL - All area fills are generated in software.
4. DASH PATTERNS - Unique dash patterns are supported for DASH, DOT, DASH2, DASH3, DASH4, and DASH5.
5. LINE WIDTH - The Zeta device uses a default line width of 0.1 (in DATAPLOT 0 to 100 coordinate units). If this is not a good value, use the SET ZETA WIDTH command to specify a better value. The best value may vary with the types of pens used as well.
6. GRAPHICS INPUT - The CROSS-HAIR command is ignored for this device.

RELATED COMMANDS

CALCOMP	=	Direct graphical output to a CALCOMP device.
POSTSCRIPT	=	Direct graphical output to a Postscript device.
TEKTRONIX	=	Direct graphical output to a Tektronix device.
DEVICE	=	Specify certain actions for the graphics output.
ZETA PEN MAP	=	Specify the pen slot to color mapping for the Zeta device.
SHOW ZETA COLORS	=	Show the available colors on the Zeta device.
SET ZETA COLORS	=	Specify the number of colors available on the Zeta device.
SET ZETA WIDTH	=	Specify the width of a single line on the Zeta device.

APPLICATIONS

Graphics device specification

IMPLEMENTATION DATE

89/2

PROGRAM

```
DEVICE 2 ZETA
PLOT SIN(X) FOR X = -6.28 0.01 6.28
QUIT
```

The disposition of the graphics output to the Zeta device is dependent of the local implementation of the Calcomp library.