

CALCOMP**PURPOSE**

Direct graphical output to a Calcomp device.

DESCRIPTION

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

- PLOTS
- PLOT
- NEWPEN
- SYMBOL
- DASHS

Note that many penplotter vendors provide a Calcomp compatible library to support their devices. The CALCOMP driver in DATAPLOT should support these devices as well. The DASHS routine, which is used to specify the dashed line type, may not be supported for these libraries.

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 Calcomp device. The details of this are dependent on the local implementation of the Calcomp library. Contact your local Calcomp 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

CALCOMP

This form designates device 1 as a Calcomp device.

SYNTAX 2

DEVICE <1/2/3> CALCOMP

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

EXAMPLES

```
CALCOMP
DEVICE 2 CALCOMP
```

NOTE 1

In order for this command to be operational, the local DATAPLOT installer must link the local 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 CALCOMP COLORS <number> identifies the number of colors available on the local Calcomp device. SET CALCOMP WIDTH <num> (in DATAPLOT 0 to 100 units) sets the line width for drawing thick lines and fills of solid regions. The default is 0.1. Set this number smaller if there are "gaps" in solid fill areas.

NOTE 3

See the Color chapter for the default slot to color mapping DATAPLOT assumes. See the documentation for the PEN MAP command in this chapter to see how to change this default mapping.

DEFAULT

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

SYNONYMS

None

DEVICE NOTES

1. **HARDWARE TEXT** - Calcomp hardware characters can be scaled to any size. Vertical strings are rotated 90 degrees. The appearance of hardware text varies depending on the particular device.
2. **COLOR** - The number of colors varies depending on the particular Calcomp device you are using. By default, DATAPLOT assumes 8 pen slots. If you have less (or more) than 8 colors, use the command SET CALCOMP COLORS to specify the number of pens that you have. In addition, use the CALCOMP PEN MAP command (documented under PEN MAP in the Output Devices chapter) to define the color to slot number mapping for slots greater than 8. The PEN MAP command can be used to override the default color to slot number mapping as well.
3. **HARDWARE FILL** - All area fills are performed in software.
4. **DASH PATTERNS** - Currently, the Calcomp device is limited to one dash pattern.
This limitation is due simply to fact that we tested this driver on a Zeta device which uses a dash scheme different than the Calcomp. Any site that has an actual Calcomp device and would like to cooperate with us on extending this should contact us (see your local site installer).
5. **LINE WIDTH** - The Calcomp device uses a default line width of 0.1 (in DATAPLOT 0 to 100 coordinate units). If this is not adequate for your Calcomp (e.g., solid fills have gaps or overlap too much), use the SET CALCOMP WIDTH command to specify a better value. The value used may vary with the types of pens used as well.
6. **GRAPHICS INPUT** - The CROSS HAIR command is ignored for this device.

RELATED COMMANDS

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

APPLICATIONS

Graphics hardcopy

IMPLEMENTATION DATE

89/2

PROGRAM

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

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