

DEVICE ... POWER

PURPOSE

Specifies whether a graphics output device is empowered (ON), depowered (OFF), opened (OPEN), or closed (CLOSE).

DESCRIPTION

DATAPLOT makes a distinction between empowering a device and opening a device. Empowering a device means that subsequent plots are generated on that device. However, the plot file is not opened and device initialization is not performed. Opening a device empowers the device, but it also opens the plot file and performs device initialization. Likewise, depowering a device means that subsequent plots are not generated on the device. However, the plot file is not closed and the device exit code is not performed. Closing a device depowers the device, but it also performs device exit and closes the plot file.

The <ON/OFF> switches are used to toggle output to a graphics file. For example, an analyst may want to make several iterations of a plot before sending the final plot to an off-line device. A typical session may look like this:

```
DEVICE 2 POSTSCRIPT
PLOT Y X
DEVICE 2 OFF
    <additional plots, none of which will go to the plot file>
DEVICE 2 ON
PLOT Y X
```

Entering DEVICE 2 POSTSCRIPT or DEVICE 2 OPEN for the DEVICE 2 ON command can cause problems on some devices (e.g., Postscript), since the device is reinitialized without being closed.

The <OPEN/CLOSE> switches can be useful on systems that implement the SYSTEM command. It allows the analyst to send plots to a plotter or printer without exiting DATAPLOT. In order to do this, the plot file must be closed first (DEVICE 2 CLOSE). After using the SYSTEM command to copy or print the output file, the device can be re-opened with a DEVICE <id> OPEN (or a DEVICE <id> <manufacturer> command).

SYNTAX

DEVICE <id> POWER <ON/OFF/OPEN/CLOSE>

where <id> is a number or parameter with an integer value of 1 to 3 that is the device identifier;

and ON empowers the device, OPEN opens the device, OFF depowers the device, and CLOSE closes the device.

EXAMPLES

```
DEVICE 1 POWER ON
DEVICE 2 POWER OPEN
DEVICE 2 POWER OFF
DEVICE 3 POWER CLOSE
DEVICE 2 ON
DEVICE 2 CLOSE
DEVICE 2 OPEN
DEVICE 2 CLOSE
```

DEFAULT

Device 1 is on, device 2 is off, and device 3 is on.

SYNONYMS

None

RELATED COMMANDS

DEVICE	=	Sets the device manufacturer and model.
DEVICE COLOR	=	Sets the device color.
DEVICE CONTINUITY	=	Sets the device continuity.
DEVICE PICTURE POINTS	=	Sets the device picture points.

APPLICATIONS

Graphics device specification

IMPLEMENTATION DATE

Pre-1987 (the distinction between opening and empowering a device was implemented 90/5)

PROGRAM

```
DEVICE 2 POSTSCRIPT
TITLE AUTOMATIC
PLOT SIN(X) FOR X = -6.28 0.01 6.28
DEVICE 2 OFF
PLOT X**2 FOR X = 0 0.1 10
PLOT COS(X) FOR X = -6.28 0.01 6.28
DEVICE 2 ON
PLOT X**3 FOR X = 0 .01 10
QUIT
```

The device 2 output is saved in the file DPPL1F.DAT. It will contain the first and fourth plot only. This file can be printed on a Postscript printer using the standard print facilities on your local operating system (e.g., `lpr -P<printer-id> dppl1f.dat` on a Unix system).