ovwrite

keys:	[ ]	*<number>*	write to the specified picture, partition or frame
	[with]	*<number>*	source picture
	threshold	*<number>*	threshold value
	layer	*<number>*	layer of source picture to write
options:	**picture/partition/frame**		write to the display picture, partition or frame
	negated		invert the thresholding condition
	clip		clip data at border limits
	re/im		write to the real or imaginary part of a complex display picture
	view		switch the view to make the display region visible

Use the **ovwrite** command to write the data from a source picture into the overlay plane of the specified display picture, partition or frame.

Examples

```
ovwrite display with 1
```

This command overlays the image in picture 1 onto the current display picture, setting overlay pixels where the source pixels are greater than or equal to the mid-range value of the source picture.

```
ovwrite  frame 1 with 2 threshold 20
```

This command overlays the image in picture 2 onto the central region of display frame 1, using a threshold value of 20.

```
ovwrite display:2 negated clip
```

This command overlays the image in the current picture onto display picture 2, setting overlay pixels where the source pixels are below the mid-range value and clipping the output at the limits of the display picture.

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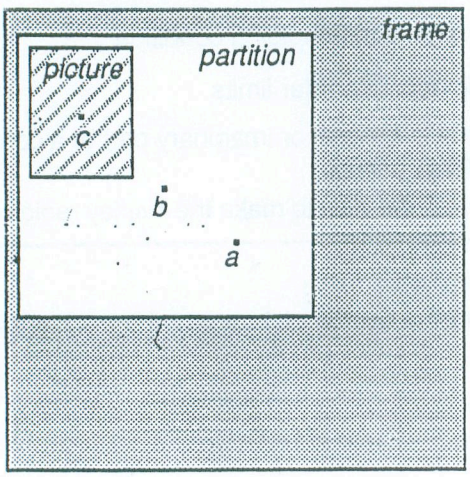
Description

The **ovwrite** command writes the data from a source picture into the overlay plane of the specified display picture, partition or frame. It can be used to annotate pictures on the display by displaying an a binary image on top of a grey-scale image. The binary image is aligned so that its origin coincides with the graphics origin on the display. The three types of coordinate graphics origin are illustrated below.



a = frame coordinate origin
b = partition coordinate origin
c = picture coordinate origin

As the overlay plane is only 1 bit deep, the source image is converted into binary form by thresholding. By default, the threshold value is the mid range of the grey levels in the source picture. You can override this default using the **threshold** key. Overlay pixels are set to 1 where source pixels are greater than or equal to the threshold value and set to 0 elsewhere. If you specify the **negated** option the thresholding condition is reversed (overlay pixels are set where source pixels are less than the threshold value).

The **ovwrite** command will always clip the image at the graphics clipping limits (frame limits for a frame, and partition limits for a partition or picture). You can specify the **clip** option to blank out part of the display which lies outside the picture, partition or frame border.

Use the **layer** key to select a single layer if the source is a multi-layer picture. By default, **ovwrite** writes the first layer of the picture to the overlay.

For complex display pictures, where the real and imaginary parts of the image are displayed side by side, **ovwrite** would normally write to both parts. If, however, you specify the option **re** or **im,** only the real or imaginary part will be written to.

Notes

see also: **ovread**
form used internally: fp

ovwrite

Defaults and Ranges

keys/options	defaults	range
[ ]	if ***picture*** or ***partition***, current display picture held in the variable *display*; if ***frame***, current display frame held in the variable *cframe*	valid picture, partition or frame number
[with]	current picture held in the variable *select*	valid picture number
threshold	middle of source picture range	real number
layer	layer 1	valid layer number
picture/partition/ frame	display picture	
re/im	write to both parts of complex display picture	