# view

| | | | |
|---|---|---|---|
| **keys:** | **[ ]** | *<number>* | picture, partition or frame to be viewed |
| | | *<n1>...<n9>* | list of pictures/partitions/frames to be viewed in turn |
| | **lut** | *<number>* | look-up table to be used for viewing |
| | **zoom** | *<number>* | (integral) zoom factor for viewing |
| | **times** | *<number>* | number of viewing cycles in rotating view mode |
| | **wait** | *<number>* | number of seconds for which each view is presented in rotating viewing mode |
| | **size** | *<x>, <y>* | dimensions of subregion to be viewed |
| | **position** | *<x>, <y>* | position/offset of subregion |
| | **pan** | *<x>, <y>* | position for centre of monitor screen |
| **options:** | **picture/partition/frame** | | view picture, partition or frame |
| | **left/right, top/bottom** | | position of subregion |
| | **clip** | | blank out view outside picture/partition/frame border |
| | **enquire** | | return current view parameters in variables *f,z,x1,x2,y1,y2* |
| | **re/im** | | centre view on real or imaginary part of complex display picture |

**view** allows you to select the region of display memory presented on the viewing monitor screen, the zoom factor and the look-up-table that is used. **view** also allows you to rotate between two or more views in succession. For information on the general key called **view**, refer to *Appendix C, Semper Keys and Options*.

## Examples

```
view zoom 8 pan x,y
```

This command views the current display picture at 8 times the normal magnification with position *x, y* centred on the monitor screen.

```
view partition display:5 lut 2
```

This command views partition *display:5* using look-up table number 2.

```
view display:3,display:4
```

This command views pictures *display:3* and *display:4* five times in alternation, switching between the two at one second intervals.

# view

```
lut 3 create colour; view display:5 lut 3
```

This command views picture *display:5* which should consist of red, green and blue layers displayed in three successive frames in full colour mode. Use the command **lut 3 create false** for false colour viewing.

```
view frame 3 top right
```

This command views the top right of frame 3 (or the current frame, held in the variable *cframe*, if you omit the frame number) using the current look-up-table, held in the variable *clut*.

## Description

**view** (and **lut**) do not alter display picture data as stored or as seen by Semper. They simply alter how they are presented on the screen.

Note that the full facilities provided by **view** may not be available on your installation and some details are determined by choices made at the time of installation. Ideally, the region that you request is presented centrally and the rest of the screen is blanked, but you may find that your installation views without blanking, 'wraps around' at frame boundaries, or does not always centre the view as you request. Type **help installation** for detail or just experiment with the **view** command on your installation.

The graphics mode that you select (**picture**, **partition** or **frame**) determines the blanking limits, and what is centred on the screen by default, that is, the appropriate coordinate origin. You can move the centre using the key **pan** (as in the second example), which *pans* the monitor to the specified position (in the appropriate coordinate system).

You can specify a viewing region using the standard 2-D subregion keys and options, for example, **size**, **position** etc. (For further detail, refer to *Appendix C, Semper Keys and Options*). The viewing region also depends on the appropriate coordinate system and the size of the monitor (subdivided if **zoom** is not 1). Therefore you can use the **position** key as a synonym for **pan** whenever the implied region is not truncated at the picture, partition or frame boundary.

For complex display pictures, where the real and imaginary parts of the image are displayed side by side, the view will normally be centred on the region which includes both parts. You can restrict the view to just the real or imaginary part by specifying the option **re** or **im.**

You can view displays in *rotation* by specifying up to nine picture, partition or frame numbers. You can alter the number of times that you view the set of displays using the **times** key and the number of seconds for which Semper waits on each display using the **wait** key, for example:

```
view display:2,display:3 times 3 wait 2
```

# view

You can list up to nine pictures for successive viewing in this way.

If your display hardware allows, you can specify the **clip** option to blank out part of the display which lies outside the picture, partition or frame border.

If the **enquire** option is set, the current view parameters: the number of the frame currently in view, the zoom factor and the extent of the viewable area in the specified coordinate frame (**picture, partition** or **frame** option) are returned in the Semper variables *f,z,x1,x2,y1* and *y2.*

## Notes:

| | | |
|---|---|---|
| variables set: | *f* | frame number of frame currently in view |
| | *z* | zoom factor |
| | *x1,x2* | X limits of view |
| | *y1,y2* | Y limits of view |
| see also: | **lut** | |

## Defaults and Ranges

| keys/options | defaults | range |
|---|---|---|
| [ ] | display, if ***picture*** or ***partition***, current frame, if ***frame***, held in the variable *cframe* | valid picture/partition/frame number |
| **lut** | if ***partition*** or ***picture***, partition default, otherwise current look-up-table held in the variable *clut* | valid look-up-table number |
| **zoom** | 1 | positive integer |
| **times** | times 5 | positive integer |
| **wait** | 1 second | real number |
| **size** | smaller of picture/partition/frame size and monitor size | less than or equal to the size of the picture/partition/frame (integers) |
| **position** | position 0,0 | within bounds of the picture /partition/frame (integers) |
| **pan** | position 0,0 or subregion centre | within bounds of the picture /partition/frame (integers) |
| **picture/partition/ frame** | picture | |
| **re/im** | centre view on both parts of complex display picture | |