

Semper 6 Command Reference

rhistogram

```
rhistogram 1 type band 4,7 type width 40 aspect 2
```

This command forms a 2-D histogram of picture 1 and displays the output on the terminal. The output picture is 40 characters wide and is displayed with an aspect ratio of 2:1.

Description

A 2-D histogram (or feature space plot) is formed from the two specified layers of the source picture. Use the **band** key to specify the two layers. You can specify the number of histogram channels using the **channels** key. The number of histogram channels are limited by the size of a Semper row buffer (proportional to the square root). Note that the number of channels determines the size of the output picture. If you do not specify a number, **rhistogram** defaults to the maximum possible number of channels. By default the **rhistogram** command displays the output histogram as a 2D image.

If you use the **preset** option, you need to specify the values using the variables *min*, *mi2* and *max*, *ma2* to delimit the ranges over which the command operates. If you do not specify **preset** then the minimum and maximum variables are set to the values found during the histogram creation. If you specify **type**, the command displays a character based histogram on the terminal, rather than displaying a histogram in graphical form on the display.

Notes

variables used:	<i>min</i> , <i>mi2</i> , <i>max</i> , <i>ma2</i> (if preset , pixel range shown by channels)
variables set:	<i>min</i> , <i>mi2</i> , <i>max</i> , <i>ma2</i> (unless preset , pixel range channels)

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Defaults and Ranges

keys/options	defaults	range
[from]	current picture, held in the variable <i>select</i>	valid picture number
[to]	current display picture, held in the variable <i>display</i> , histogram shown in graphical form	valid picture number
channels	maximum possible value	possible integer
band	<i>none</i> ; band must be specified	possible integer
times	1	positive integer
aspect	default given by the page command	positive integer
width	default given by the page command	positive real number
position	0, 0	within the bounds of the picture (integers)
size	whole picture	less than or equal to the size of the picture (integers)
repeating	interpolate between histogram counts when magnifying	
letter	lettering on	
border	bordering on	
type/log	histogram shown in graphical form on display	
verify	verification off	