

NAME

asy – Asymptote: a script-based vector graphics language

SYNOPSIS

asy [*options*] [*file* ...]

DESCRIPTION

Asymptote is a powerful descriptive vector graphics language for technical drawings, inspired by MetaPost but with an improved C++-like syntax. Asymptote provides for figures the same high-quality level of typesetting that LaTeX does for scientific text.

OPTIONS

If no arguments are given, Asymptote runs in interactive mode.

If “–” is given as the file argument, Asymptote reads from standard input.

A summary of options is included below. The effect of most options can be negated by prepending **no** to the option name. Default values for most options may also be entered in the file **.asy/config.asy** in the user’s home directory using the long form:

```
import settings;  
batchView=true;
```

For a complete description, see the Info files.

-V,-View

View output; command-line only.

-absolute

Use absolute WebGL dimensions [false].

-a,-align C|B|T|Z

Center, Bottom, Top, or Zero page alignment [C].

-aligndir pair

Directional page alignment (overrides align) [(0,0)].

-antialias n

Antialiasing width for rasterized output [2].

-auto3D

Automatically activate 3D scene [true].

-autobillboard

3D labels always face viewer by default [true].

-autoimport string

Module to automatically import.

-autoplain

Enable automatic importing of plain [true].

-autoplay

Autoplay 3D animations [false].

-autorotate

Enable automatic PDF page rotation [false].

-axes3 Show 3D axes in PDF output [true].

-batchMask

Mask fpu exceptions in batch mode [false].

-batchView

View output in batch mode [false].

-bw Convert all colors to black and white [false].**-cd directory**

Set current directory; command-line only.

-cmyk Convert rgb colors to cmyk [false].**-c,--command string**

Command to autoexecute.

-compact

Conserve memory at the expense of speed [false].

-d,--debug

Enable debugging messages [false].

-digits n

Default output file precision [7].

-divisor n

Garbage collect using purge(divisor=n) [2].

-embed

Embed rendered preview image [true].

-envmap

Enable environment map image-based lighting (Experimental) [false].

-exitonEOF

Exit interactive mode on EOF [true].

-fitscreen

Fit rendered image to screen [true].

-framedelay ms

Additional frame delay [0].

-framerate frames/s

Animation speed [30].

-globalwrite

Allow write to other directory [false].

-gray Convert all colors to grayscale [false].**-h,--help**

Show summary of options; command-line only.

-historylines n

Retain n lines of history [1000].

-iconify

Iconify rendering window [false].

-inlineimage

Generate inline embedded image [false].

-inlinetex

Generate inline TeX code [false].

-interactiveMask

Mask fpu exceptions in interactive mode [true].

-interactiveView

View output in interactive mode [true].

-interactiveWrite

Write expressions entered at the prompt to stdout [true].

-k,-keep

Keep intermediate files [false].

-keepaux

Keep intermediate LaTeX .aux files [false].

-level n

Postscript level [3].

-l,-listvariables

List available global functions and variables [false].

-localhistory

Use a local interactive history file [false].

-loop Loop 3D animations [false].**-m,-mask**

Mask fpu exceptions; command-line only.

-maxtile pair

Maximum rendering tile size [(1024,768)].

-maxviewport pair

Maximum viewport size [(2048,2048)].

-multiline

Input code over multiple lines at the prompt [false].

-multipleView

View output from multiple batch-mode files [false].

-multisample n

Multisampling width for screen images [4].

-offline

Produce offline html files [false].

-offscreen

Use offscreen rendering [false].

-O,-offset pair

PostScript offset [(0,0)].

-f,-outformat format

Convert each output file to specified format.

-o,-outname name

Alternative output directory/filename.

-p,-parseonly

Parse file [false].

-pdfreload

Automatically reload document in pdfviewer [false].

-pdfreloaddelay usec

Delay before attempting initial pdf reload [750000].

-position pair

Initial 3D rendering screen position [(0,0)].

-prc

Embed 3D PRC graphics in PDF output [true].

-prompt string

Prompt [>].

-prompt2 string

Continuation prompt for multiline input [..].

-q,-quiet

Suppress welcome text and noninteractive stdout [false].

-render n

Render 3D graphics using n pixels per bp (-1=auto) [-1].

-resizestep step

Resize step [1.2].

-reverse

reverse 3D animations [false].

-rgb

Convert cmyk colors to rgb [false].

-safe

Disable system call [true].

-scroll n

Scroll standard output n lines at a time [0].

-shiftHoldDistance n

WebGL touch screen distance limit for shift mode [20].

-shiftWaitTime ms

WebGL touch screen shift mode delay [200].

-spinstep deg/s

Spin speed [60].

-svgemulation

Emulate unimplemented SVG shading [false].

-tabcompletion

Interactive prompt auto-completion [true].

-tex engine

latex|pdflatex|xelatex|lualatex|tex|pdftex|luatex|context|none [latex].

-thick Render thick 3D lines [true].

-thin Render thin 3D lines [true].

-threads

Use POSIX threads for 3D rendering [true].

-toolbar

Show 3D toolbar in PDF output [true].

-s,-translate

Show translated virtual machine code [false].

-twice Run LaTeX twice (to resolve references) [false].

-twosided

Use two-sided 3D lighting model for rendering [true].

-u,-user string

General purpose user string.

-v,-verbose

Increase verbosity level (can specify multiple times) [0].

-version

Show version; command-line only.

-vibrateTime ms

WebGL shift mode vibrate duration [25].

-viewportmargin pair

Horizontal and vertical 3D viewport margin [(0.5,0.5)].

-wait Wait for child processes to finish before exiting [false].

-warn string

Enable warning; command-line only.

-where

Show where listed variables are declared [false].

-xasy Special interactive mode for xasy [false].

-zoomPinchCap limit

WebGL maximum zoom pinch [100].

-zoomPinchFactor n

WebGL zoom pinch sensitivity [10].

-zoomfactor factor

Zoom step factor [1.05].

-zoomstep step

Mouse motion zoom step [0.1].

SEE ALSO

Asymptote is documented fully in the asymptote Info page. The manual can also be accessed in interactive mode with the "help" command.

AUTHOR

Asymptote was written by Andy Hammerlindl, John Bowman, and Tom Prince.

This manual page was written by Hubert Chan for the Debian project (but may be used by others).