**Usage:**

bamresize.exe [OPTIONS] filename.bam [filename2.bam...]

**Options:**

Option: -h or --help

Function: Displays the help message.

Example: bamresize.exe -h or bamresize.exe --help

Option: -p PERCENT or --percentw PERCENT or --percentw=PERCENT

Function: Resize frame widths by PERCENT percent. The default is 75 percent (3/4 of the original size).

Example: bamresize.exe -p 50 and bamresize.exe --percentw 50 and bamresize.exe --percentw=50 all resize the frame widths to 50 percent of the original.

Option: -q PERCENT or --percenth PERCENT or --percenth=PERCENT

Function: Resize frame heights by PERCENT percent. The default is the value for -p / --percentw if specified, otherwise it is 75 percent.

Example: bamresize.exe -q 125 and bamresize.exe --percenth 125 and bamresize.exe --percenth=125 all resize the frame heights to 125 percent of the original.

Option: -x NUMBER or --modxoffset NUMBER or --modxoffset=NUMBER

Function: Modifies all frame X-Offsets (horizontal positions) by NUMBER. NUMBER can be positive or negative. The default is 0.

Example: bamresize.exe -x -20 and bamresize.exe --modxoffset -20 and bamresize.exe --modxoffset=-20 all decrease the frame X-Offsets by 20. This shifts the frames 20 pixels to the right.

Option: -y NUMBER or --modyoffset NUMBER or --modyoffset=NUMBER

Function: Modifies all frame Y-Offsets (vertical positions) by NUMBER. NUMBER can be positive or negative. The default is 0.

Example: bamresize.exe -y 30 and bamresize.exe --modyoffset 30 and bamresize.exe --modyoffset=30 all increase the frame Y-Offsets by 30. This shifts the frames 30 pixels up.

Option: -s NUMBER or --setxoffset NUMBER or --setxoffset=NUMBER

Function: Sets the frame X-Offsets (horizontal positions) to NUMBER. NUMBER can be positive or negative. The default is NONE (do not set).

Example: bamresize.exe -s 0 and bamresize.exe --setxoffset 0 and bamresize.exe --setxoffset=0 all set the frame X-Offsets to 0.

Option: -v NUMBER or --setyoffset NUMBER or --setyoffset=NUMBER

Function: Sets the frame Y-Offsets (vertical positions) to NUMBER. NUMBER can be positive or negative. The default is NONE (do not set).

Example: bamresize.exe -v -10 and bamresize.exe --setyoffset -10 and bamresize.exe --setyoffset=-10 all set the frame Y-Offsets to -10.

Option: -u VALUE or --unify VALUE or --unify=VALUE

Function: Pads the frames with rows and columns of transparent pixels to force all frames to have the same X-Offset, Y-Offset, Width, and Height. This prevents the frames from appearing to twitch after being resized. Accepted values for VALUE are 0 (do not unify), 1 (unify), and 2 (unify, but continue to pad the frames until they are square i.e. Width and Height are the same). The default is 1 (unify).

Example: bamresize.exe -u 0 and bamresize.exe --unify 0 and bamresize.exe --unify=0 all explicitly disable the unify feature.

bamresize.exe -u 1 and bamresize.exe --unify 1 and bamresize.exe --unify=1 all explicitly enable the unify feature. Explicitly enabling unify is unnecessary as it is enabled by default.

bamresize.exe -u 2 and bamresize.exe --unify 2 and bamresize.exe --unify=2 all explicitly enable the unify feature, plus the frame dimension will be further padded with transparent rows/columns until the dimensions are square.

Option: -t VALUE or --trim VALUE or --trim=VALUE

Function: Trims transparent padding (rows and columns of transparent pixels) from the frames after they are resized. X and Y Offsets are adjusted accordingly. This is the opposite of the unify feature. If unify is set to 2 (make square), the final frames will not be trimmed, regardless of what value trim is set to. Accepted values for VALUE are 0 (do not trim) and 1 (trim). The default is 1 (trim).

Example: bamresize.exe -t 0 and bamresize.exe --trim 0 and bamresize.exe --trim=0 all explicitly disable the trim feature.

bamresize.exe -t 1 and bamresize.exe --trim 1 and bamresize.exe --trim=1 all explicitly enable the trim feature. Explicitly enabling trim is unnecessary as it is enabled by default.

Option: -e FORMAT or --export FORMAT or --export=FORMAT

Function: Exports the frames in the basic format specified by FORMAT after all other processing of the frames is finished. Examples of FORMAT include "bmp", "png", and "gif". No frames are exported by default.

Example: bamresize.exe -e bmp and bamresize.exe --export bmp and bamresize.exe --export=bmp all export the final frames in the windows bitmap (.bmp) format.

Option: -d or --debug

Function: Displays some debug information.

Example: bamresize.exe -d filename.bam >filename\_log.txt or bamresize.exe --debug filename.bam >filename\_log.txt

This saves debug information to the file filename\_log.txt.

**Filenames:**

Resizes all frames in filename.bam [filename2.bam...], applying all OPTIONS specified, and creating new files called filenamer.bam [filename2r.bam...]

The filename(s) to convert can use wildcards.

**Order of Operations:**

Any of the above options may be specified with any other option, except for -h / --help which is mutually exclusive with all others. The order in which the OPTIONS are passed to bamresizer does not matter. The order that the options are applied is thus (assuming all options are enabled): frames are unified (but not squared), frames are resized and dimensions and offsets are scaled accordingly, frames are trimmed if unify is not set to 2 (square) otherwise frames are squared, frame offsets are set to value specified, frame offsets are modified by value specified, and finally frames are exported in the format specified. Debug information is generated throughout the process.

**Examples:**

bamresize.exe --help

Help message is displayed, then program exits.

bamresize.exe filename.bam

Frames in filename.bam are unified, resized to 75% of original dimensions, trimmed, and saved to filenamer.bam

bamresize.exe --percentw 50 --percenth 75 --unify 1 --trim 1 --setxoffset 25 --setyoffset -5 --modxoffset -5 --modyoffset 25 --export png --debug filename.bam >filename\_log.txt

Frames in filename.bam are unified, frame widths are resized to 50%, frame heights are resized to 75%, frames are trimmed, frame X-Offsets are set to 25, frame Y-Offsets are set to -5, frame X-Offsets are decreased by 5, frame Y-Offsets are increased by 25, frames are exported to .png, and debug information is saved to filename\_log.txt.