

Band Limitation Manual (Ver. 1.0)

2022.11 AO Quest

Introduction

I want to apply band limitation to an image easily! ... This software can apply the simple band limitation to the image. Besides, the software can amplify the band.

Generally, reducing the low frequency leads to the smoothing effect and reducing the high frequency leads to the noise reduction effect. On the other hand, amplifying the high frequency leads to the sharpness effect.

Function of Reducing Artifact

This software provides a function reducing the artifact without using the window function.

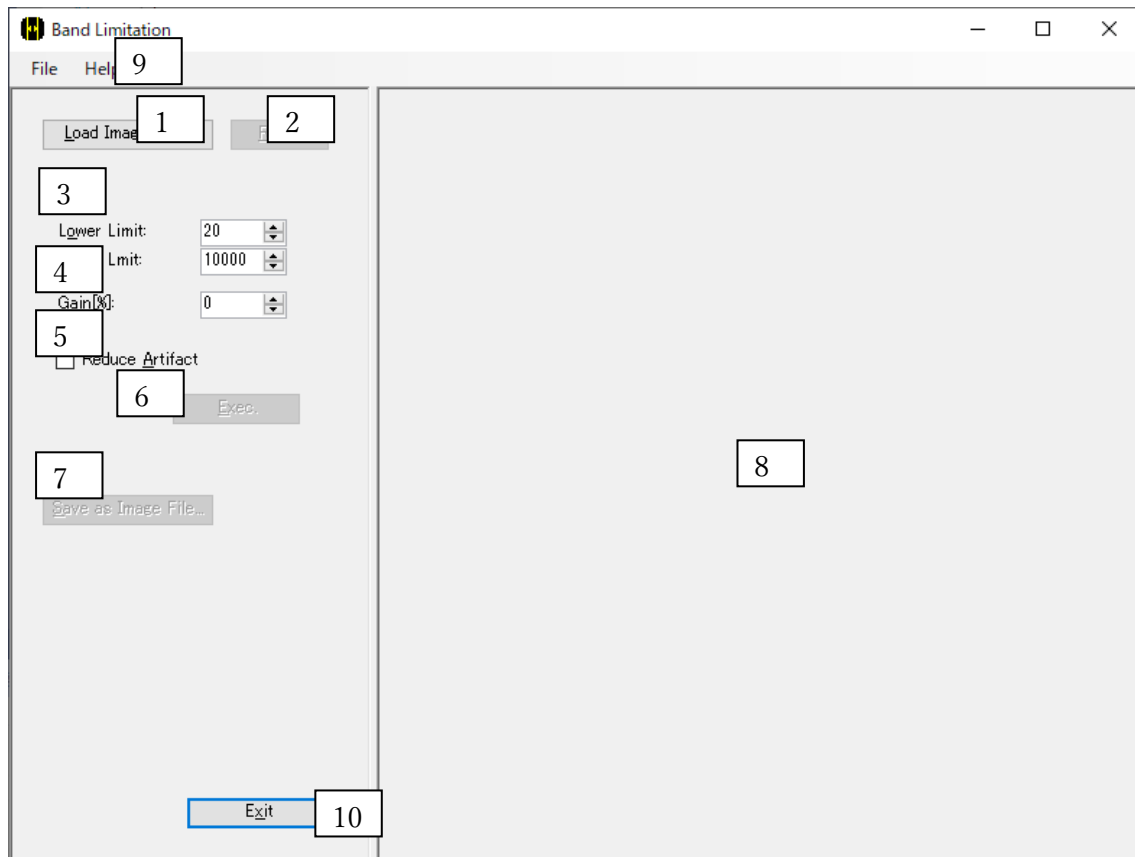
Operation Environment

- * Windows10 64bit, or later
- * .Net Framework4.8

Installation Method

There isn't installer. Copy the software-folder to any local directory, then execute the software(BandLimitation.exe).

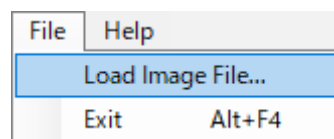
Software Function Description



1. Load Image File

The software loads an image file. The image will be displayed on Display Pane(8).

This can be available from File Menu.



Besides, dragging and dropping an image file can be available.

2. Reset

The display(8) will be returned to the state(1) when the image file was loaded.

3. Lower Limit/ Upper Limit

Specify the band by "Lower Limit" and "Upper Limit." Specify harmonic order. In detail,

first harmonic order's period means image's diagonal length, and maximum harmonic order's period means 2 pixels. 0(zero) order means DC component(the average of whole pixels' intensity).

4. Gain

Specify the gain[%] for the band settings(3). The value less than 100 means attenuation, more than 100 means amplification.

5. Reduce Artifact

Enable the function of reducing the artifact. This can reduce the artifact resulting from the band limit, but the execution time becomes a few times longer. As an attention, the specifiable range of the band's upper limit(3) will be 2 times.

6. Exec

Execute the band limitation. Because the color image's band limitation is executed for each RGB plane, it takes a few times longer than the monochrome image's one.

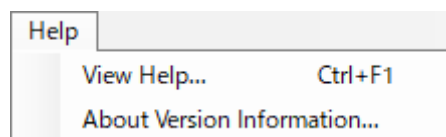
7. Save as Image File

Save the image applied by the band limitation. The image's size is same as the original's (source's) one.

8. Display Pane

This pane is for displaying the image. Loading the image file can be available by dragging and dropping.

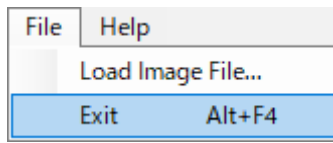
9. Help



View Help	Display Help (this document).
About Version Information	Display Version information.

10. Exit

Exit the software. This can be available from File Menu.



Terms of Service

This software is freeware. AO Quest does not take any responsibility for the damage caused by the software.

Inquiry

Please visit the following URL for the bug or the request.

<https://ao-quest.com/>