

A Guide to Using Adobe Photoshop 6.0+ For Perspective Control

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The Problem

When using an SLR or any other camera without built-in perspective controls, taking pictures of tall structures can be problematic. Edges of vertical structures may appear to lean in to a greater degree than desired. Your options are:

- 1) Move back and use a normal or telephoto lens trying to keep the camera as level as possible (not tilted up or down with respect to the façade of the building).
- 2) Gain a high perch from which to take the picture.
- 3) Make adjustments during the printing process by tilting the easel.
- 4) Use a “shift” or “perspective control” lens.

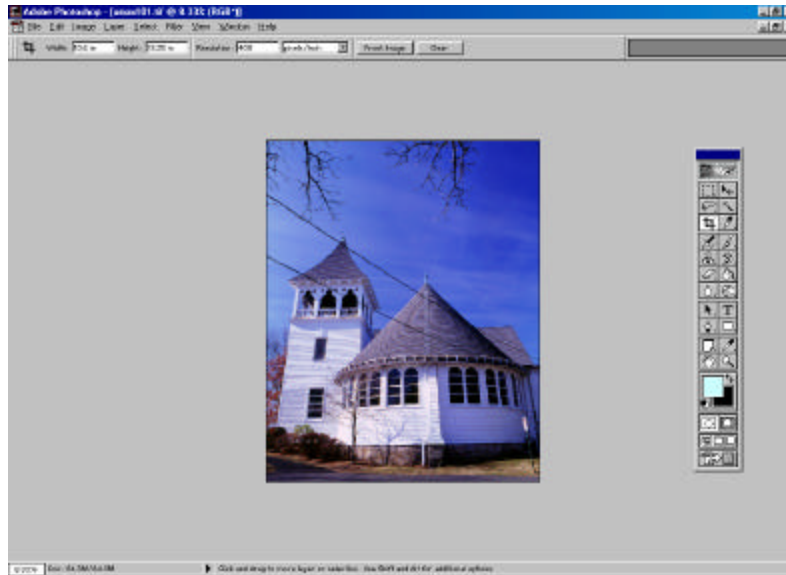
Nos. 1 and 2 may be impractical, no. 3 may be inconvenient or not available and no. 4 can be expensive.

Fortunately, if one has the digital tools available, the necessary perspective adjustments can be made entirely in the computer.

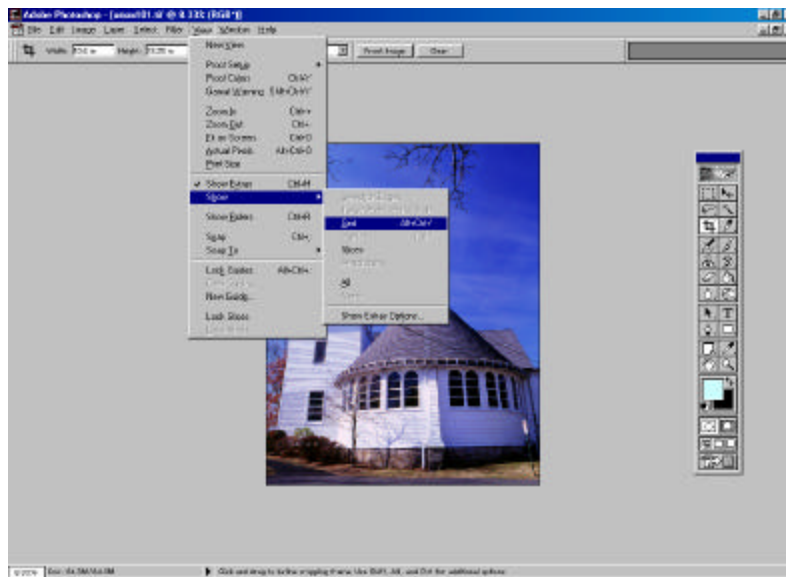
This document shows how to adjust perspective in Photoshop 6.0+.

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Step 1: Open the file and size the image with room to spare at the top and bottom. You will probably need the room to make the perspective adjustments. The image shown was taken with a medium format SLR using a wide-angle lens, close up and with a slight uptilt. The result is an image in which the vertical lines converge strongly to the center and the building seems to be leaning backwards.

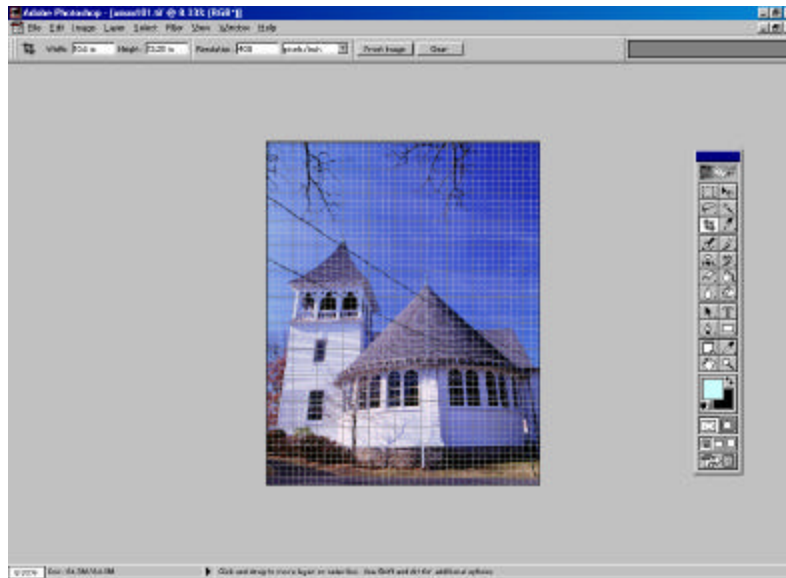


Step 2: Turn on the grid. This helps you align the verticals with the edges of the image. Click on **View > Show > Grid**.

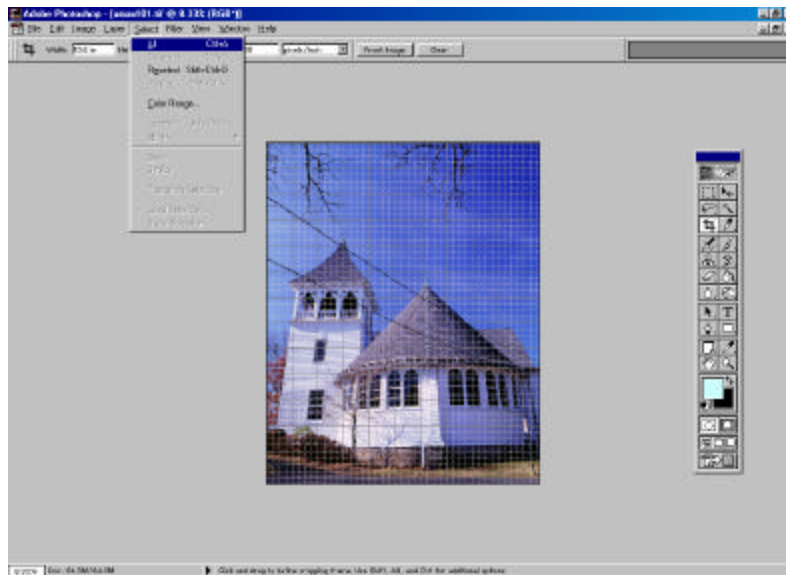


A Guide to Using Adobe Photoshop 6.0+ for Perspective Control

This is the result:



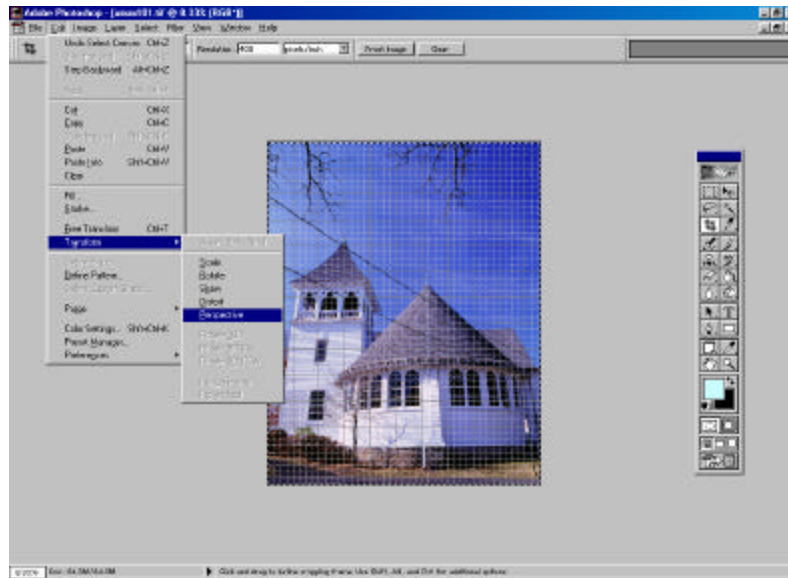
Step 3: Select the entire image for adjustment by clicking **Select > All**.



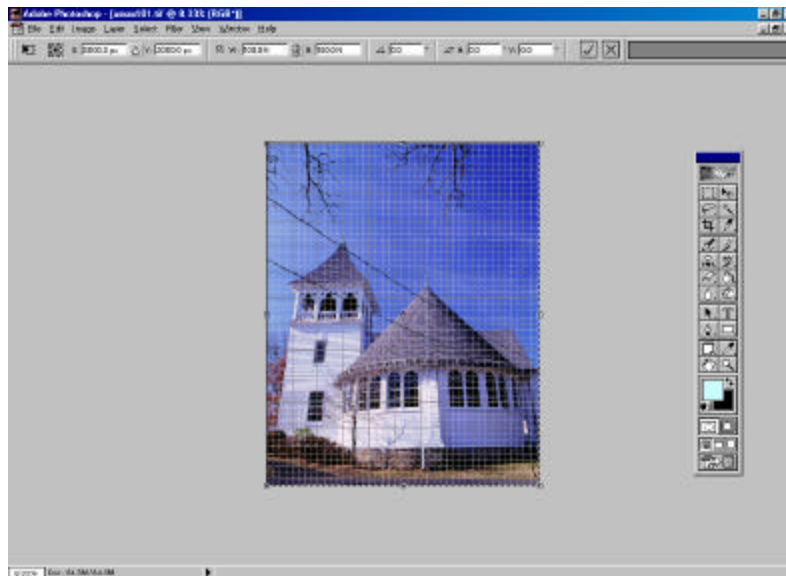
The border of the image shows the “crawling ants” moving dashed line indicating that the entire image is selected for adjustment.

A Guide to Using Adobe Photoshop 6.0+ for Perspective Control

Step 4: Choose perspective control by clicking on **Edit > Transform > Perspective**.

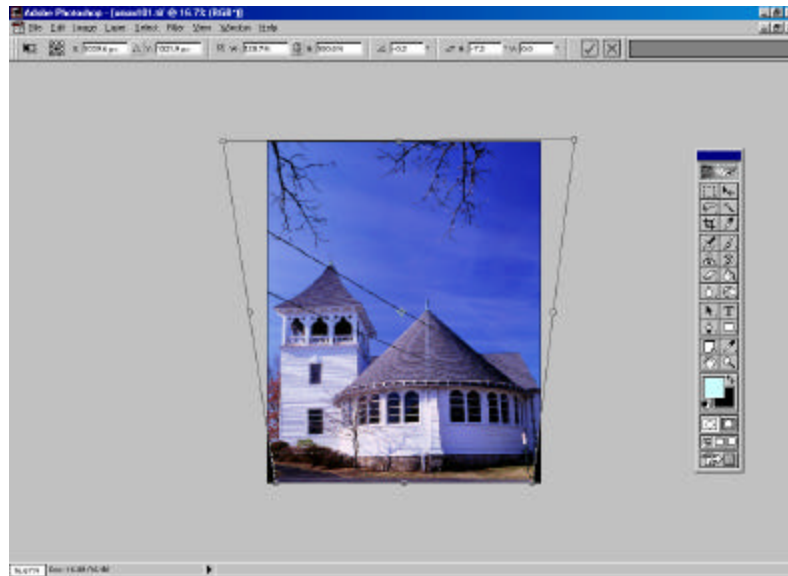


The result is a frame around the image with eight handles (small boxes) on its perimeter.

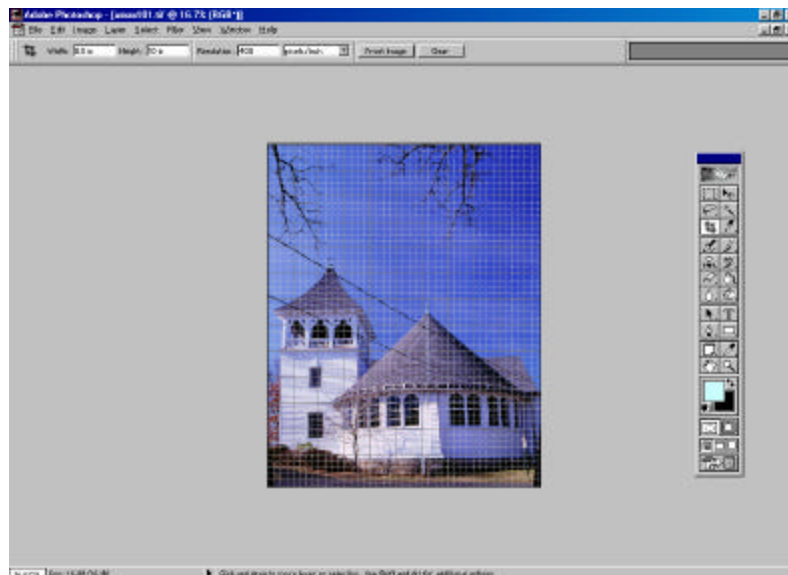


A Guide to Using Adobe Photoshop 6.0+ for Perspective Control

Step 5: Use the cursor to move these handles and drag the perspective box corners and sides to manipulate the image as desired. Experiment!

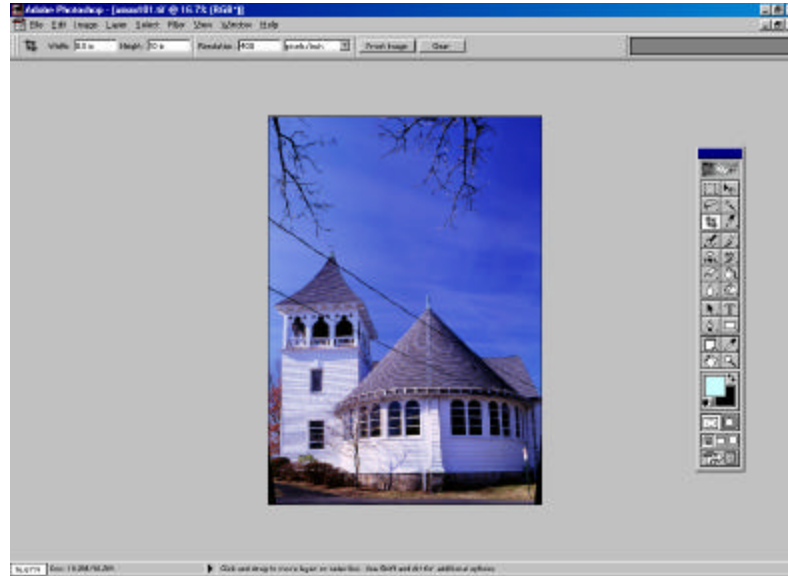


When the desired effect has been achieved, press **Enter**.



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Step 6: To finish click on **Select > Deselect** and **View > Show > Grid**. The perspective control work may leave the image too squat. This can be corrected by adjusting the image height by an appropriate amount.



Crop as needed, etc. The black triangles left by the perspective tool (the original sides of the image) can be eliminated by judicious use of the cloning tool.

The image now has its verticals more nearly vertical and the backward lean is greatly reduced. If desired, the verticals could be made more nearly vertical but with some additional loss of ground to the black triangles. This was a learning experience. If you expect to adjust perspective this way, you need to frame more loosely than normal to ensure enough ground to go with the topmost parts of the image.