

360 E57 Converter

Version 1.5 - 12/07/2026

Background

360 E57 Converter has been developed to spatially align and relate 360 imagery and compile to an E57 file for later integration with viewing platforms such as Hexagon GeoCloud, or point cloud processing suites such as Cyclone. The tool was designed and developed to support a specific workflow, both on site and in processing, which is outlined in the following document.

Data Capture Best Practice

When on site collecting 360 imagery it is always advised to follow the best practice guidance from the manufacturer to ensure picture quality is as high as possible. That said, the software does no image analysis or degradation. Photographs should be exported as high resolution equirectangular JPG.

When taking photographs, ensure the camera location can be resolved to a coordinate value. This may be taking images at fixed intervals along a track or road alignment, or it may require other positioning methods. The tool can work equally with global, local or arbitrary coordinates but these must be cartesian (X, Y, Z).

When taking photographs, it is advised to ensure the camera is directed towards the position of the next photograph. This will make processing and fine positioning easier in a later step. It is also therefore advised to understand which way is “forward” when using your camera.



All 360 cameras have a natural forward position - differing between manufacturers

Processing Step-by-Step

1. Open 360 E57 Compiler v1.5.exe

- 1.1. Select the folder within which your photography is stored
You will not see the images, just select the folder
- 1.2. Select the .CSV containing X, Y and Z coordinates
*The CSV must have 4 columns: filename (exactly as it is saved - including the extension), Easting, Northing, Height. **Column headers are not required.** You may wish to add a height offset to ensure the picture location is Xm from the ground level, however you derive that value*

2. Click “Next: Verify Pairs”

Enter the Visual & Spatial Verification Screen. It is recommended to “step through” all images to ensure no stray mis-shots make it into the compiler.

2.1. Preview Window

Ensure image is correct and aligns with highlighted information in asset list

2.2. Spatial Metadata

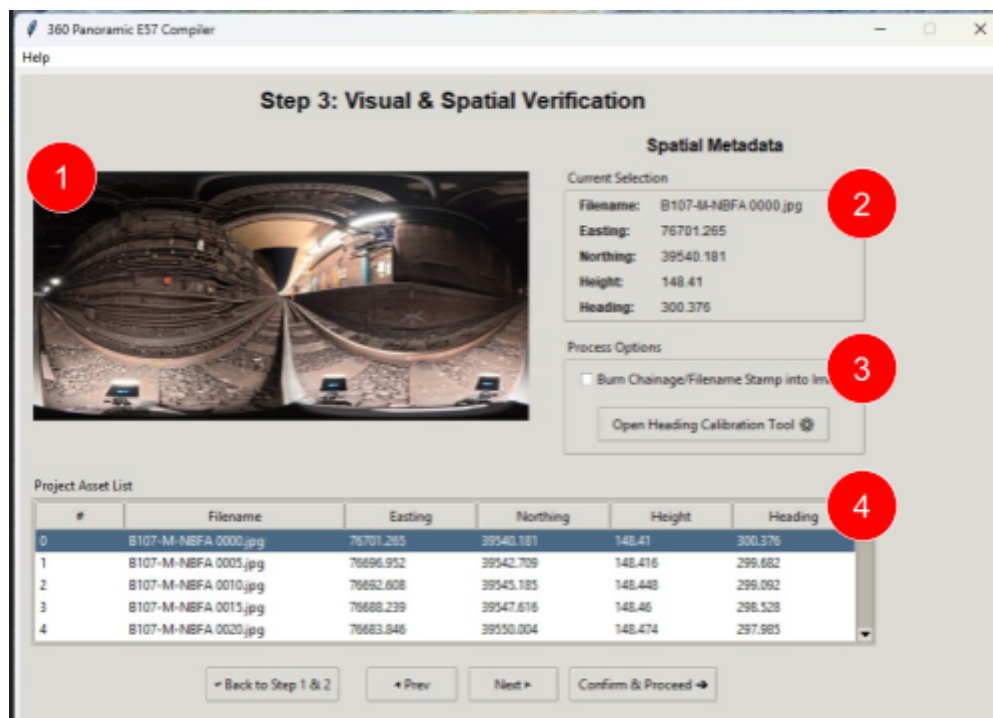
View and confirm coordinates, filename and heading

2.3. Processing Options

Choose whether to imprint the filename onto the image directly, and enter the fine alignment calibration tool (See 3.)

2.4. Project Asset List

All listed asset data from loaded CSV file to enable a contextual view



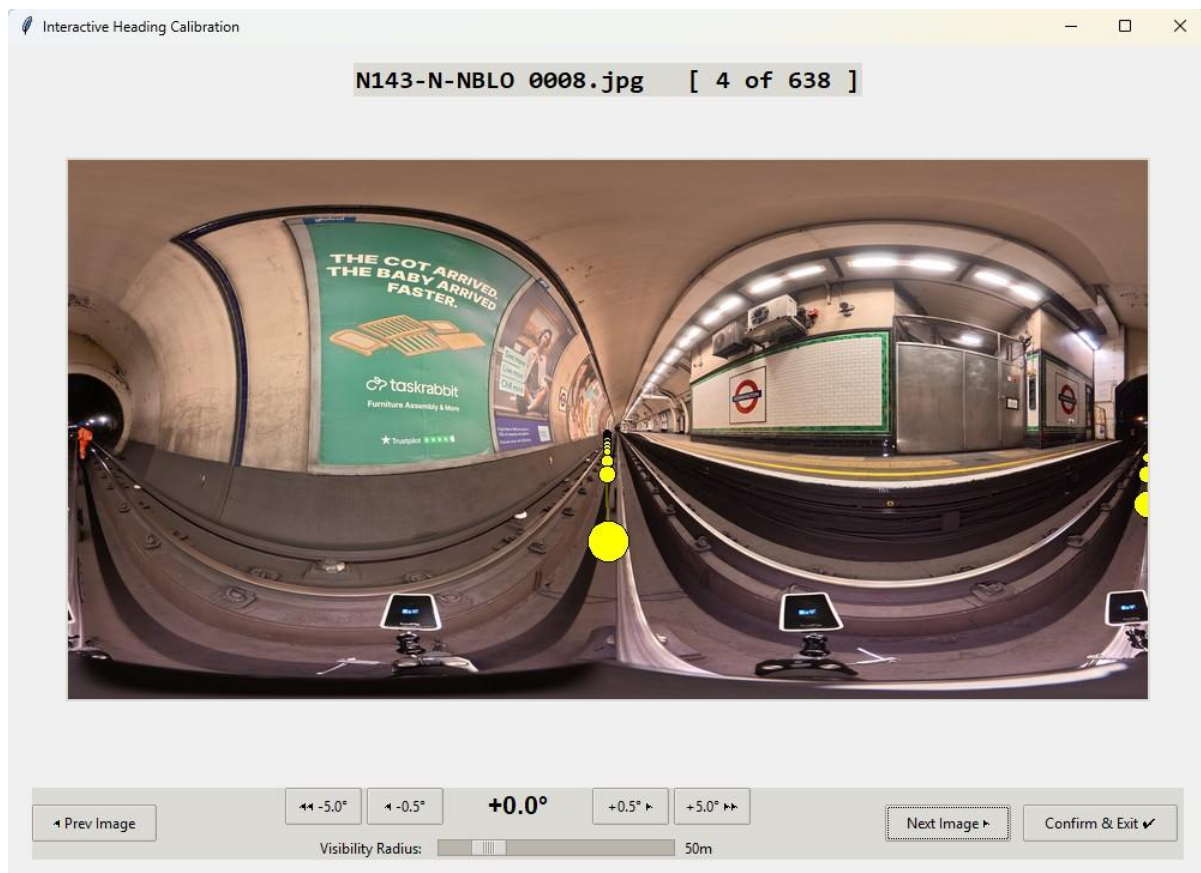
Step 3: Visual and Spatial Verification

3. Heading and Calibration Tool

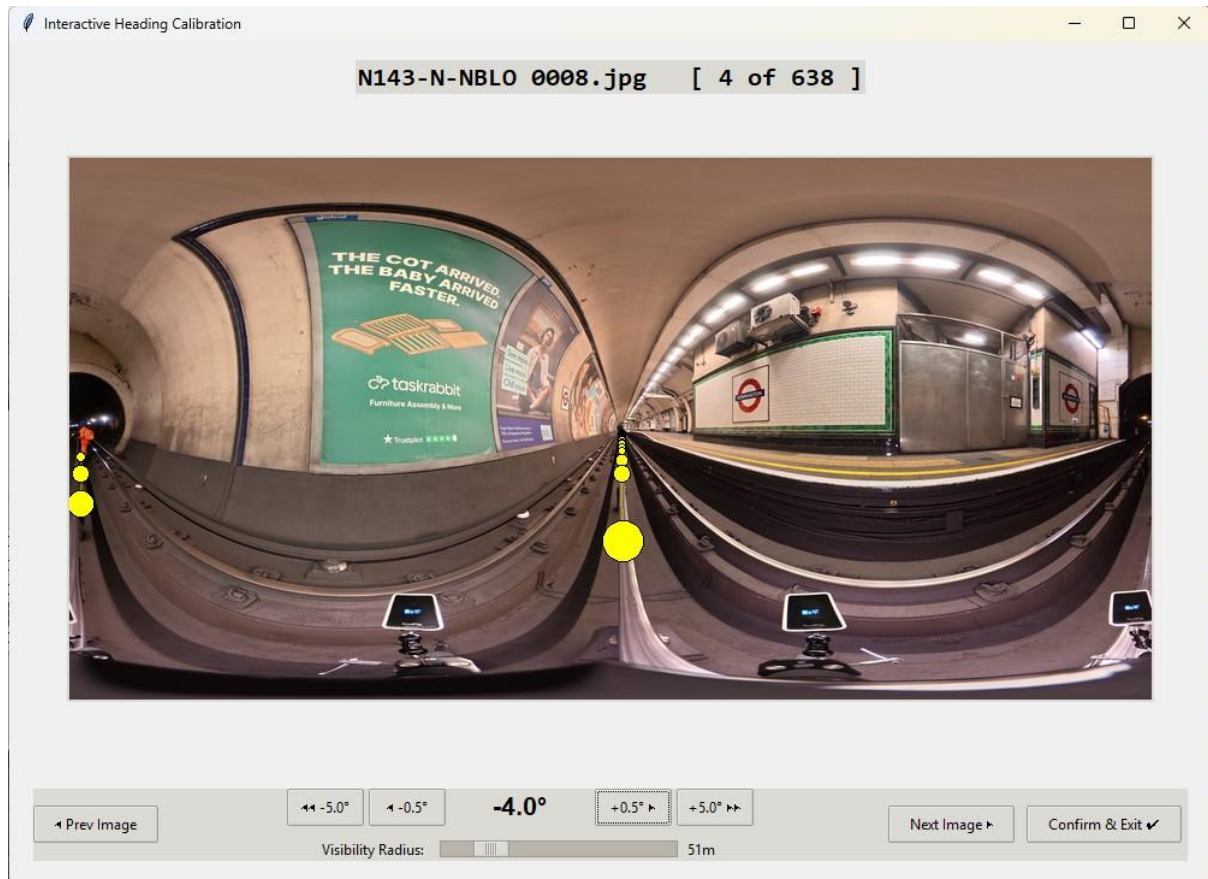
This tool allows for the fine tuning of the calculated image heading. Most 360 cameras are small and difficult to ensure they are pointing exactly “forward”. This tool allows the user to bring the heading back on line.

In this view, all other image positions can be viewed as yellow circles which approximate closely how they will be shown in virtual tour platforms. Height differences are not reflected in this view, however.

- 3.1. Use the visibility radius slider to change how far you can see forwards and backwards
- 3.2. If the alignment requires adjustment, use the coarse ($\pm 5^\circ$) adjustment buttons (or $\uparrow + \leftarrow/\rightarrow$) or fine ($\pm 0.5^\circ$) adjustment buttons (or $\leftarrow/\rightarrow$) to bring the circles back in line
- 3.3. When satisfied move to the next image with the Next Image button (or $\uparrow$)



Calibration tool showing poor alignment (circles appear to veer away from the track)



Calibration tool after alignment adjustment (note the -4.0° adjustment to the calculated value)

4. Compiling and Saving

At the final screen, simply select the output file destination (and name), if required. By default the tool will select the same folder from step 1 and assign a generic name.

Once complete, click “Compile Project” to complete your processing.

The resulting file will be a .E57 ready for further processing, integration, or loading to a viewing platform.

Support and Contact

For support, comments, suggestions or requests please in the first instance contact us by email at ben@surveytools.co.uk