Three steps to make virtual tours

Set up your camera and lens, take pictures.

Use Panoweaver to stitch images capture from your camera in order to make panoramas.

Import the panoramas you get in Panoweaver to Tourweaver to make impressive virtual tours.
To create virtual tours, you need the following equipments

**DSLR camera or Digital camera**

For DSLR camera, APS-C and Full Frame DSLR camera could be employed in the panorama creating.

APS-C DSLR camera (a few popular examples):
- Nikon: D3000, D5000, D5100, D70, D80, D90, D200, D300, D7000
- Canon: 500D, 550D, 600D, 60D, 7D

Full Frame DSLR camera
- Canon: EOS 5D I, 5DII, 1D
- Nikon: D3s, D3x, D700

If you have problems in identifying your DSLR Digital camera, please contact support@easypano.com

Further information about selecting camera and lens, please see: [http://www.easypano.com/pw6-equipment.html](http://www.easypano.com/pw6-equipment.html)

**For Digital camera**

Nearly all the digital cameras are supported in Panoweaver, however, by using Digital camera, it is very hard to create 360 degree panorama.

**A fisheye lens**

Please see the specific formula to identify the property of your images.

Crop factor (also called focal length multiplier, "FLM" or format factor) multiply the focal of the lens equals a specific index called D.

| D <or=8mm | Circular fisheye images(2-3) for one single panorama. |
| 8mm < D < 12mm | Drum fisheye images (4-6) for one single panorama. |
| 12mm < D < 15mm | Drum fisheye images (4-6) for one single panorama without ceil and floor. |
| 15mm < D < 16mm | Full frame fisheye images (8-12) for one single panorama. |
| D >16mm | Wide angle/normal images (tens or hundreds) for one single panorama. |

**Tips:**

- The more pictures you need to take, the better shooting and stitch skills are need. If you shoot with other wide angle lens or zoom lens, need to take hundreds of images to stitch to one single spherical panorama, while circular fisheye lens you just need 2-3 pics and 4-6 pics for drum fisheye lens)
- Prime lens is preferred in panorama filed
Fisheye lens that we have tested in our lab:

<table>
<thead>
<tr>
<th>Lens Make</th>
<th>Model Description</th>
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<tr>
<td>SIGMA</td>
<td>8 mm F3.5 EX DG Circular Fisheye</td>
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<tr>
<td>OLYMPUS</td>
<td>ZUIKO DIGITAL ED 8mm F3.5 Fisheye</td>
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<tr>
<td>SIGMA</td>
<td>AF 10mm F2.8 EX HSM</td>
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<tr>
<td>PENTAX</td>
<td>smc PENTAX-DA FISH-EYE 10-17mm F3.5-4.5 ED (IF)</td>
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<tr>
<td>SIGMA</td>
<td>15mm F2.8 EX DG DIAGONAL FISHEYE</td>
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<tr>
<td>SAMYANG</td>
<td>8mm F3.5 Fisheye CS</td>
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<tr>
<td>NIKKOR</td>
<td>AF DX Fisheye 10.5 mm f/2.8G ED</td>
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<tr>
<td>SONY</td>
<td>16mm F2.8 Fisheye</td>
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Software package.

Studio 2010 Ultimate (Panoweaver+Tourweaver). In your case, Panoweaver could only stitch and publish one single panorama, if along with Tourweaver, could make virtual interactive tours by importing as many panorama images as you want.

Panoweaver 7 is a professional photo stitching tool, which can stitch any types of photos into high quality full 360 degree or partial panoramic images. It supports HDR creation and manual stitching for inserting matching points. Output formats include HTML5 VR (iPhone & iPad), Full screen Flash VR (based on html),

Examples please see Gallery at below

As a professional and powerful virtual tour creating tool, Tourweaver 6 not only inherits all the great features in version 5, but also introduces new ones like Google Maps support, various virtual tour effects, Standalone Swf virtual tour, as well as HTML5 tour for your iPhone & iPad.
Tripod
In normal conditions, a stable tripod is essential for shooting panorama images, nearly all the standard tripod could be used along with the panohead to make the shooting process stable and accurate.

Panohead
If the project you need to do is a big project, such as a museum tour or a school tour which require 20-100 points (one point for one single panorama, tours make them connected). A mistake in rotate degree will cause you reshoot the pictures. Panohead allow you to reduce the mistakes though shooting.

Tips:
Famous and most used brand would be Agno’s Nodal Ninja and Manfrotto.
Normal price for a panohead is USD 300-500. Some electronic panohead with specific auto-rotate functions will make the shooting process more easier, however, the price is double than manual one.

By considering the difficulty level of a new comer to select equipments from varies hardware in the market, we provide a package called OUTFIT. OUTFIT contains sigma 8mm fisheye lens, Studio 2010 Ultimate for windows and Agno’s MrotatorTCPshort(Panohead)at a price of USD 2300. You could check the package here: http://www.easypano.com/store-outfit.html