Agno's Mrotator CP Oblique Pro Kit Nikon 950/990/995 Nikkor FC-E8

Test Report: July 2006

Introduction: The 60° angle deck panorama bracket and rotator base are designed to accommodate digital cameras. It provides a method for capturing single row images suitable for creating spherical panoramic image. This report uses the Nikon 990 and Nikon FC-E8 8mm fisheye lens.

Specifications: Agno's Mrotator CP Oblique Pro Kit. The kit includes Mrotator rotator base, 60° bracket and a camera standard Manfrotto quick change rectangle adapter plate. The adapter plate is similar to Manfrotto product nr. 3299.

Together the Base * and bracket are 18.5cm wide x 11cm deep (arm piece) x 11cm high (7¼ " w x 4"d x 4"h). The product has a black knob and black protective paint finish. The 60° Oblique bracket and arm have index scales. The bracket base has 2 15mm diameter round yellow/green spirit level on the top and bottom side of the bottom plate.

* The Mrotator base is 78mm high x 60mm diameter (3"high x 2 ¼" diameter) and is .43kg or 1 lb.

Design Features: The Mrotator CP Oblique Pro can be separated into 2 pieces allowing for easy travel storage. All the alignment control knobs are with in easy reach while standing from behind. Location of the control knobs and spirit level (if mounted on the back side) are easy to read and understand.

Setup Procedure: Place the Manfrotto 488RC2 ball head on a Manfrotto 3001d tripod. Place the assembled Mrotator CP Oblique on the ball head quick release plate.

No Parallax Point (NNP). Parallax is the apparent change in the position of an object that results in change in the point of view. It is necessary to align the camera on the panorama head to view the object from the exact same position. Loosen the Mrotator CP Oblique horizontal bracket knob (see above LEFT photo) and gently slide the bracket until the camera's view finder "Center" focus box is lined up directly over the top of the tripod's center rotation point.

No Parallax Point (NPP) - Find Entrance Pupil location.
The entrance pupil point location is a function of the lens and not the camera. It is the position inside the lens where the incoming image is inverted and projected back to the film plane or sensor.

We found that fisheye lenses typical have more than 1 NNP, depending on the closest object in front of the lens. The lens rim is a good starting location. This would be where the lens glass meets the metal housing with the painted letters "Nikon Fisheye FC-E8" . Place to spot on the lens directly over the point of rotation.

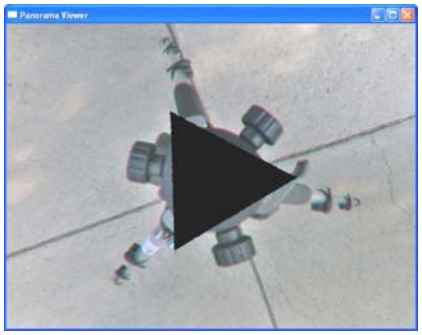
Taking the 3 Panorama Photos
Setup the tripod and Mrotator CP Oblique bracket. You should take 3 images at 120° intervals.

Photographs


1 2 3


1 2 3

Stitch the 3 images with PTgui 5.8.4 stitching software.



The Mrotator CP Oblique design keeps all the bracket parts outside the Nikon FC-E8 180° lens viewing area. This pan head has a very small footprint. If your pan head appears like in the photo, you have done a good job in locating the No Parallax Point. Your stitching should be near perfect.

No Zenith  No Nadir 

The Mrotator CP Oblique does NOT tilt 90° up (zenith) and down. Suggest using the TCPshort.

3 image Stitched panorama

This finished panorama contains hard visual lines. A good correct alignment test is hard line convergence in the top 10%, mid 60 % of the image. Precision Mrotator CP Oblique panorama head with correct alignment will produce an excellent result.

Our testing equipment:

Camera: Nikon 990
Compact Flash Card: 1 GB Lexar Media Professional 80x WA (also had 256mb compact flash card)
Prime Lens: Nikon FC-E8
Images: "HI**"** JPEG
Pan Head: Agno's Mrotator CP Oblique
Support: Manfrotto/ Bogen Ball Head 488CR2 (supports 17.6 lbs)
Tripod: Manfrotto/ Bogen 3001d

Qualities:

The Mrotator CP Oblique design makes it easy to align the camera and lens so that you will get repeated "NO error" type stitched images. Take precision single photo's the first time and your stitched panorama should be almost error free.

Normally all controls are at the back of the camera. The Mrotator CP Oblique alignment knobs are also easily accessed from the back side of the tripod. This means you can stand in one location and make ALL the adjustments. This prevents accidentally hitting a tripod leg.

Rotating through the Mrotator click stops is very easy. The clicking sound and feel are solid.

Using the Manfrotto Quick Change Plate adapter (US Nr. 3299) is a great idea. It permits removing and re-mounting the camera on the Mrotator CP Oblique without having to realign the camera again. The camera plate portion of the Manfrotto 3299 remains on the camera base allowing re-use on another tripod or monopod.

Suggestions:

Total assembled tripod, ball head, Mrotator CP Oblique pan head, are made of steel and aluminum material. The rotator base is master crafted aluminum for accurate rotation. The Oblique Bracket is master crafted, precision cut and formed structural steel that assures the camera and lens will be properly supported during the imaging process. Together the Mrotator TB rotator base and meticulousness formed bracket will assure exact positioned imaging.

Recommendation: Excellent panoramic hardware specializing in 60° Oblique camera position which maximizes full image height.