

GTP R10 Package for Canon EF 8-15mm

FANOTEC
Nodal Ninja

Quick Reference Guide

© 2012 Nodal Ninja

Support: www.nodalninja.com/forum
Tutorials: www.youtube.com/nodalninja
Store: store.nodalninja.com



Nodal Ninja Ultimate R10 7.5° Tilt with lens ring for Canon 8-15mm f/4 USM fisheye is a very portable and easy to use package for Google Trusted Photographers.

Package Contents of R10 GTP Package



Depending on resellers, the package may come pre-assembled or individually with R10 tilt head, lens ring, Rotator Mini (RM) and compass bubble level.

Installing R10 Tilt Head and Bubble Level on Rotator Mini

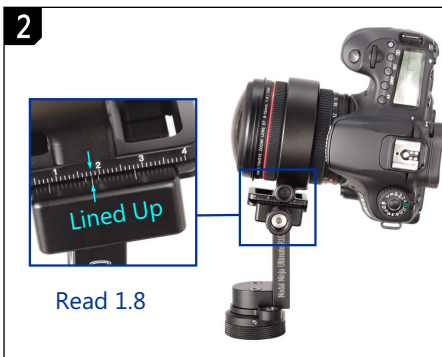


Place the level on RM with bubble facing up. Place R10 tilt head on the level as shown. Align for the mounting sockets. Install 2 M5 flat head screws to fix R10 head to RM.

Mounting Lens Ring Clamp on the Tilt Head



First of all, make sure the R10 head has an upward tilt. If not, reinstall it. Install the lens ring on the lens according to its installation guide at the back. Mount the lens on the camera. Mount lens ring on QR clamp of R10. Tighten the clamp slightly.



Slide the lens ring plate (LRP) to the NPP setting. There are 3 lines marked on the QR clamp. Use the center line for distance reading. Other lines are 1.5mm apart from the center line. Use them to assist reading to an accuracy of 0.5 mm. Use the side opposite to the QR handle for best accuracy. NPP setting for 4 shots around at 8mm focal length is 1.8. Check that the LRP has "LRP45X" labeled at the base. For other LRPs, the setting is 0.8.



To orient the panorama in the map, move the tripod so that the red pointer aligns with the white mark on the compass. Now the camera is pointing to the North. Look at the compass from the front for best reading accuracy. Level the R10 head by adjusting tripod legs or a level adjustment device.

Installing the Preset Integrated Stop Plate on Lens Ring



A preset integrated stop plate sets the lens at the NPP quickly and precisely. Verify the stop plate is marked "103". It is for Canon 8-15mm f/4 on R10 7.5° up tilt and 4 shots around specifically. Align the stop plate with the base of LRP. Push to snap it in place.



Install the stop screw (came with the stop plate) at the middle socket on the QR clamp. Remove any other safety screw installed. Mount the lens ring on the clamp. Slide until it falls into the stop. Confirm the NNP reading is 1.8 (or 1.825 more precisely).

Lens Ring for Canon EF 8-15mm f/4 L USM

Quick Reference Guide

© 2012 Nodal Ninja

Support: www.nodalninja.com/forum
Tutorials: www.youtube.com/nodalninja
Store: store.nodalninja.com

FANOTECH
Nodal Ninja



The lens ring consists of a metal outer ring and a plastic inner ring that fits the lens snugly. The plastic ring allows reproducible mounting of lens and protects the lens from stress by providing maximum area of contact to the lens.

Preparing the Lens for Ring Mounting



Reproduced Focus Distance Scale

Reference Mark

Manual focus is preferred for making stitched panos. Turn the **AF/MF** switch to **MF**. The focus distance scale will be hidden by the lens ring. Users can use live view to set a focus distance where the distant and near objects are both in focus.

Alternatively, they are recommended to reproduce the scale near the red ring on the lens. Follow the guide in the next page for the procedure. With the labels affixed, focus distances can be easily read by the manner described below.

Firstly, make sure the reference mark is between the maximum and minimum focus distances. Secondly, rotate to align the reference mark to the long line at minimum focus distance. Thirdly, reverse the rotation to align the reference mark to the long line at maximum focus distance. Fourthly, reverse the rotation again to align the reference mark to the desired focus distance value. **Remember to align the reference mark to both extremes first and not to go outside the extremes during the steps.**

For best sharpness, do tests to find the optimal focus distance and aperture settings for different situations.

Installing the Lens Ring to the Lens



Loosen the knob on the outer ring until its slit is about 6mm (1/4") wide. Squeeze to take out the inner ring. Check the label on the inner ring to confirm with the lens in use and the direction of mounting. The arrow should point to the front of lens.



Align the slit of the inner ring to **AF/MF** switch on lens. Stretch the ring to pass over the zoom limit switch. Position it evenly between the focus ring and zoom ring. Use the cross section of slit for alignment. Keep even spacing between the slit and **AF/MF** switch. Place a piece of paper to cover the AF/MF switch to protect it from glue of tape.



Fix the inner ring with a piece of tape about 40mm (1.5") long. Stretch the tape so that the ring will grasp the lens firmly. Cut any tape that goes beyond the chamfered area on either side of the slit. Test that focus ring and zoom ring rotate smoothly. If not, nudge the inner ring slightly away from the hindered focus ring or zoom ring and test again.



Align the outer ring to the slit of inner ring. Insert the outer ring (loosen its knob further if needed) from the back of the lens. Tighten its knob slightly. Rotate it so that it snaps to the inner ring and rotates smoothly. Rotate the zoom ring to align a nearest ridge on the rubber ring to the reference line. Align the 90° notch to the reference line with the help of rubber ridge. Tighten the knob fully.



Mount the lens to the camera and it is now ready for use on any Arca Swiss compatible gear. The camera will be in portrait mode with handgrip pointing up. To set a different roll angle, redo the last step and align the reference mark to other notches (at 30° intervals) for accurate roll angle alignment.

Reproducing the Focus Distance Scale Using Pre-made Image



Open this page as image in PDF compatible image editor such as Photoshop. Crop and move the above label image to the proper positions when printing on a die cut label. Print on a high quality label sheet and cut in pieces. Alternatively, use a PDF utility program that supports cropping and print the label image only.



Place the reference mark label on the focus ring as shown. This is the new reference mark. Place label for maximum focus distance to cover the text "FISHEYE ZOOM" as shown. Rotate the focus ring to the left until the focus scale stops moving. This is the maximum focus distance. Continue to rotate the ring to the left till the reference mark aligns with the long line in the label. Then reverse the rotation and carefully feel a sudden increase in friction. Stop immediately when friction rises! Place label for minimum focus distance at position indicated. Make sure the long line aligns with the reference mark. Rotate the ring between these 2 lines. Friction should rise sharply when reaching these lines. Shift the position of one label (if needed) to fine tune the accuracy. With the maximum and minimum positions set, the scale is ready.

Reproducing the Focus Distance Scale From Scratch



The lens uses USM motor for auto focus. The focus ring is not rigidly linked to the focus mechanism. That means the ring can still be rotated after reaching the limits of the focus distances. This presents a challenge in reproducing the scale. One workaround is to reproduce the whole range including the maximum and the minimum and turn the focus ring in a special manner described below.

First of all, turn AF/MF switch to MF! The area near the red ring is best place for the new scale. Place a small label on the focus ring as indicated, put a line there. This is the new reference mark. Place a label of about 4mm x 30mm on the ring above to cover the text "FISHEYE ZOOM" as indicated. This ring has some taper angle. Label will be curved if it is too long. Rotate the focus ring to the left till the maximum focus distance is reached. A sudden increase of friction in the ring can be felt. Continue to rotate until the new reference mark is near the left edge of the label as indicated. Add a mark to denote the maximum focus distance. Then reverse the rotation to the minimum focus distance. Carefully feel the increase in friction. Stop immediately when friction rises! Denote this minimum focus distance. Rotate the ring between these 2 extremes. Friction should rise sharply when reaching their markings. Shift the position of one label (if needed) to fine tune the accuracy of these extreme positions. With the extreme positions set, the other distances can be added easily by the manner described below.

Firstly, make sure the reference mark is between the extreme positions. Secondly, rotate to **just** touch one of the extreme marks. Thirdly, reverse the rotation to **just** touch the other extreme mark. Fourthly, reverse the rotation again to the distance values of interests (e.g. 1m and infinity) and add the markings. To mark distances not available on the original scale, place a target with known distance to camera sensor, manually focus to achieve sharp target image, mark the label with known distance value. **Remember to touch both extremes first and not to go outside the extreme limits during the steps.**