Capturing RTI images with the dome

- 1) Make sure camera is set to fully manual exposure, ASA and focus. Turn off "preview" too.
- 2) Empty the camera's memory card if its very full (helps with reliable speed)
- 3) Press Focus on the controller to illuminate an object with a few lights



Initial start-up screen on the controller



One press of Focus turns on a group of lights

Use a program such as digiCamControl to see a Live-view from the camera to help focus it.

4) Setting the correct exposure level

The Focus lights are not the same brightness as a normal capture. To test the exposure press the focus button again while it is on – it will change to a single LED cycle. Take some images to check you have the correct settings (eg 100ASA, $1/10^{th}$ and f9). For good depth of field use an f number higher than 5.6 but not necessarily the maximum of your lens (where it may cause some blurring). Exposure Cycle stops after a while so you may need to re-start it.



The exposure cycle screen for one LED at a time5) Set the shutter speed in the controller



You must set the shutter speed using the Up/Down buttons to the side of the screen. This cycles through all possible shutter times and is used to calculate how long the lights are on. If it is too long (eg 1/2s instead of 1/4s) it will still work but take longer to capture.

6) Capturing an RTI sequence

Once your camera is setup it is best to close any preview software in case it tries to download each shot – which can interrupt the sequence.



Press the GO button and the full capture process will run, showing which LED it is currently using.

7) After capture - the images are all on your camera's card. To use our downloader it is easiest to copy all the images into an empty folder on the PC, then run the downloader – which will copy batches of images into separate folders in the correct structure for processing.

Other Notes

For advanced tuning of the delay after each exposure (note this returns to the default on power cycling). Press the exposure Down button once then hold the Focus button. Each press of the Down button will now cycle through the delay in 100ms intervals.



The best speed depends on the camera and how fast the memory card is. If this delay is too short the camera may stop capturing as its buffer overflows. You can then increase the value by say 300ms for a reasonably safe value. Capturing RAW will require a longer delay if you have a slow card. If your sequence includes black images that is a sign that the timing went wrong.