## FOCAL FOR MAC – QUICKSTART GUIDE

INSTALLING THE MONO FRAMEWORK

FoCal requires the Mono framework runtime to be installed on OS X before using. If you have already used FoCal for Mac, you can skip this step.

You can download the Mono framework runtime from Reikan at www.fo-cal.co.uk/mono or from the Mono website (www.go-mono.com). Once downloaded, you should open the DMG file to mount it, and then run the installation package. Once this has completed, you can install FoCal.
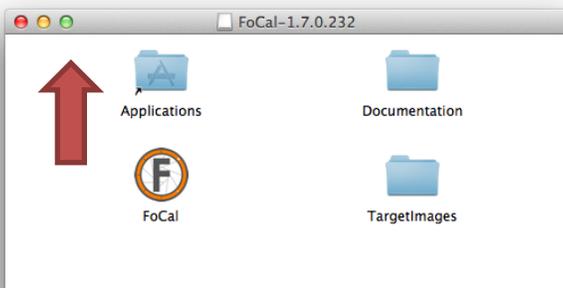
INSTALLING FOCAL

To install FoCal, you should download the DMG file from the LMS at www.fo-cal.co.uk/lms .   When you open the DMG file, you'll see the FoCal application and a link to your Applications folder - simply drag FoCal across to the Application folder to copy to your computer. You'll also see folders for the full **Manual** and the **Target Images** to print.

THE FOCUS TARGETS

You'll find the target images in the DMG file (see above). How you print depends on the test you're going to run, but for the Fully Automatic AF Calibration test you should print the standard target at A4 or US Letter size, ideally on Matte paper with an inkjet printer. The target is supplied as both a PDF file and a high resolution PNG file so you can choose the best one for your printer (generally PDF for home printing, and PNG if you're sending away for printing).

LICENSE

The FoCal software is licensed to specific cameras, and if you entered the serial numbers on the purchase page on the website then your purchase email will contain the license for your cameras. If you need to change or add new cameras, you can do so online at www.fo-cal.co.uk/lms.

When you first run FoCal, you need to enter the license code- once this is done, you'll not need to do it again unless you change cameras. The easiest way to do this is to select ALL of the license text (in the white box on the website) and copy to the clipboard - then when you run FoCal, the "Paste License" button will be active and you can just click to apply the license:
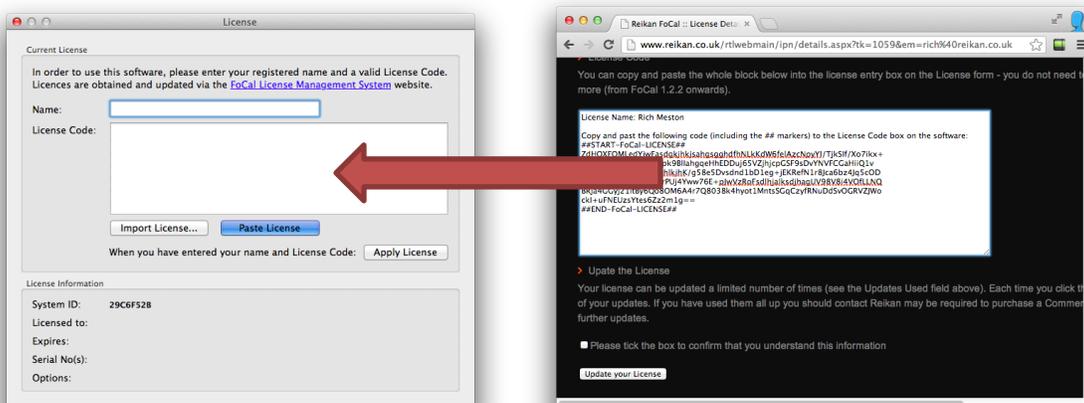
SETTING UP FOR TESTING

You need to attach the printed target image to a wall, and put the camera on a sturdy tripod aimed at the target around 25-50x the focal length of the lens you're testing (so for example with a 50mm lens you want around 2-2.5m as a testing distance). Your camera should be connected to the computer with a USB cable which is usually supplied with the camera, and also set up as follows:

- Evenly light the target (don't use fluorescent, mains LED or changeable outdoor light)

- Cover the eyepiece of the camera

- Make sure lens image stabilisation (IS/VR/VC/OC) is disabled

- Make sure the lens can focus on the target

You should check in the manual for more details about setup.

TARGET SETUP

Run Target Setup (or press ⌘T), and click **Start** to get a LiveView of the image from the camera. You can manually align the cross with the centre of the circles on the target, or click Target Search and adjust until you see a green tick as shown below:

FULLY AUTOMATIC CALIBRATION (PLUS/PRO)

On the main FoCal window (the one with the picture of the camera and list of tests) choose **Fully Automatic** button (or press ⌥⌘F) to open the test.

Then simply click **Start** and the test will run:
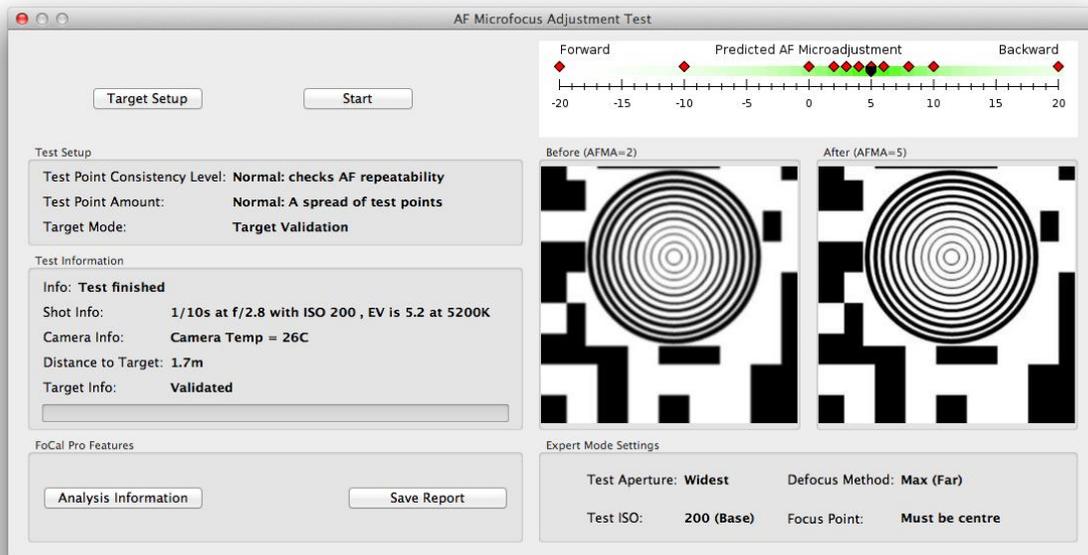
The test should take a few minutes and give you the result for the best AF Microadjustment/Fine Tune value for your camera/lens combination.