WCC MACRO WORKSHOP

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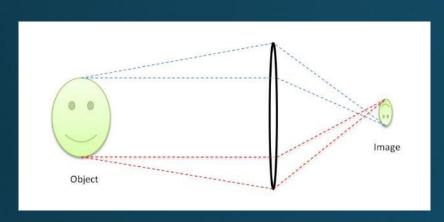
What is Macro?



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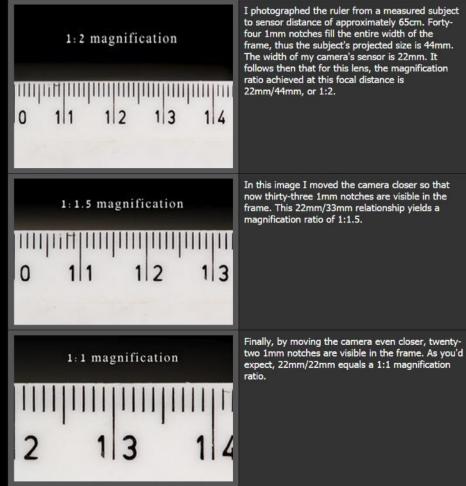


1:1 Reproduction Ratio



The reproduction ratio is a comparison to the size of the subject to size of the sensor plane (or film plane).

A macro lens should be able to create a 1:1 reproduction ratio.



Sensor Size

Sensor size comparison chart

		-							
Туре	1/3"	1/2"	2/3"	4/3"	APS-C	Canon Nikon Pentax DX	Super 35	APS-H	35mm Full Frame
sensor w x h	4.8 x 3.6mm	6.4 x 4.8mm	8.8 x 6.6mm	17.8 x 10mm	22.2 x 14.8mm	23.6 x 15.5mm*	24.89 x 18.66mm	28.7 x 19.1mm	36 x 24mm
sensor diagonal	6mm	8mm	llmm	20.41mm	26.7mm	28.4mm	31.1mm	34.5mm	43.3mm
sensor area	17.3mm ²	30.7mm ²	58.1mm ²	178mm ²	329mm ²	366mm ^{2*}	464.44mm ²	548mm ²	864mm ²
crop factor	7.21	5.41	3.93	2	1.62	1.52	1.39	1.26	1
applicable cameras				Panasonic AG-AFI01	Canon EOS 7D	*Approx	Arri Alexa		Canon EOS 5D MkII
					Canon EOS 60D		Sony PMW-F3		Nikon D3s
					Canon EOS 50D		Sony SRW-9000PL		
					Sony NEX-VG10E		Sony F35		

What is Macro?

Subject: Sensor

1:4 1:1 4:1





What is Macro?





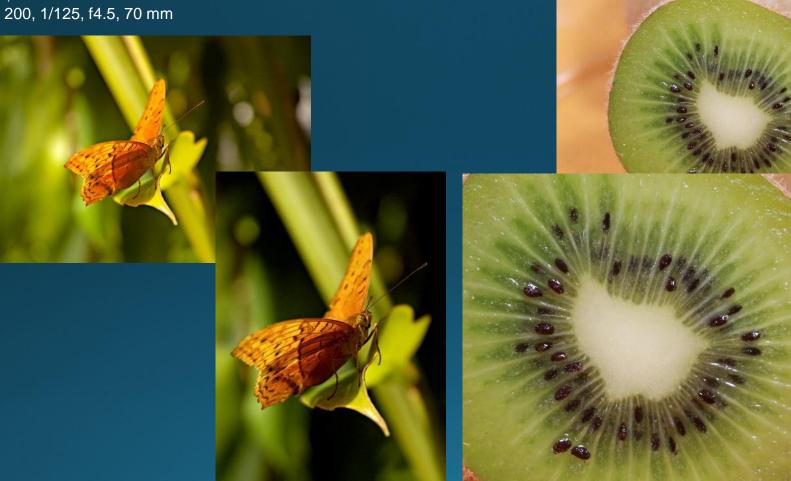




Where to begin?

Nikon D70 (6 megapixels) Kit Lens 18-70 mm, f3.5-4.5 AF-s iso 200, 1/125, f4.5, 70 mm

Canon 5D mk iii 100 mm f/2.8 Macro Lens iso 12800, 1/80, f8, 100 mm

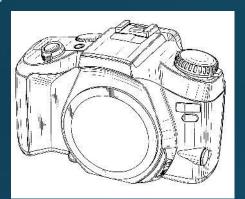


What Equipment do I need...

And Some of these...

Essential





One of...









Close up filter

- Magnifying glass on the front of your lens
- •Use with a telephoto.
- •No loss of light.
- •AF will work.
- Image may be degraded by additional lens elements



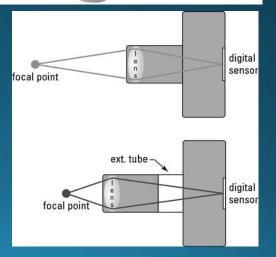


Extension tubes/rings

- •Increases the distance between the lens and the sensor, moves the focal plane closer allowing magnification
- •Use with a prime lens with good maximum aperture.
- Image not degraded by additional lens elements
- Suffer from loss of light.
- Dark through the view finder
- AF may be difficult.

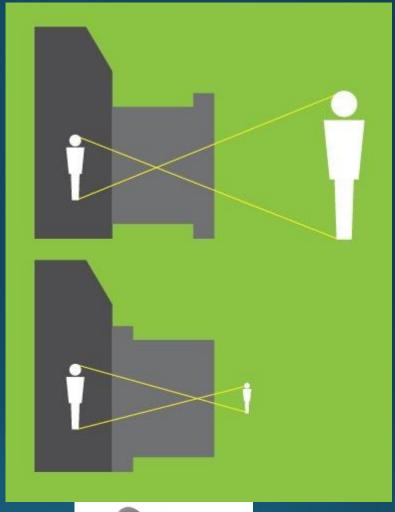






Reverse Lens

- If you already own a 50mm prime or standard kit lens (around 18-55mm focal length range) then reverse lens macro is also the least expensive way there is to get up close.
- The reverse lens technique involves turning the lens around so that the rear element points outwards, and the front element faces the camera body. You can buy special adapters to attach the reversed lens to either your camera body or another lens.







Reversed lens









http://digital-photography-school.com/reverse-lens-macro-close-up-photography-lesson-3/

Macro Lens

- •Made for purpose.
- •1:1 Magnification ratio.
- •Fine focus control at high magnification.
- •Sharp at high magnification.
- •Will work with:
 - Tele-converters
 - Reversed lens
 - Extension tubes (Bellows)
 - Close up filters.
- Expensive specialty lens







Importance of lighting

Nikon D300s Tamron 90mm f2.8 Macro iso 200, 1/200, f 16 (With flash)

Nikon D300s Tamron 90mm f2.8 Macro iso 200, 1/160, f 6.3 (No Flash)
Two frames combined with stacking software





Lighting for Macro













Lighting for Macro

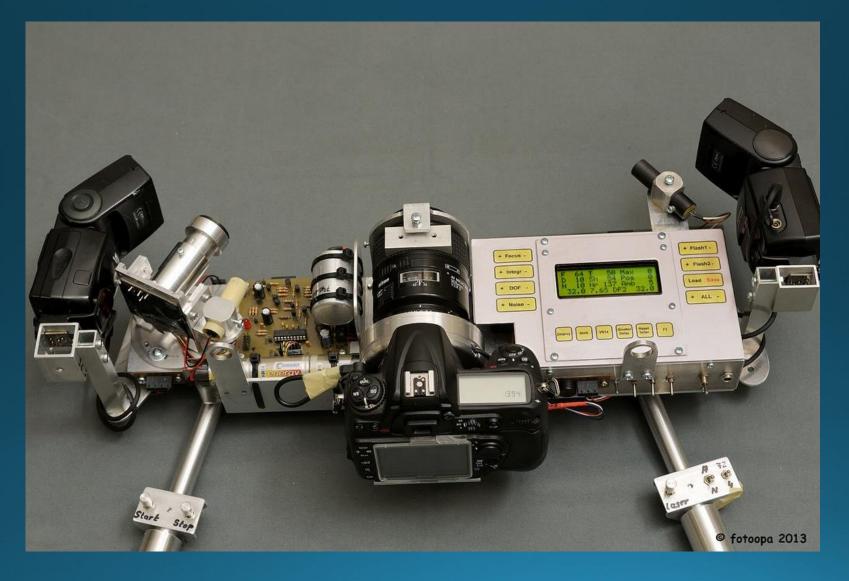




STE3 + 600exrt

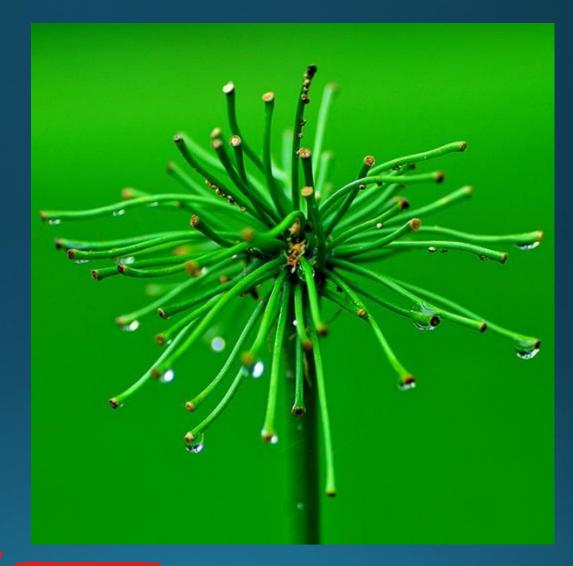


Sure, I can do that...



Some small tips for shooting Macro

GET AS
CLOSE AS
YOU CAN
TO YOUR
SUBJECT



Canon Collective

View Point and Perspective







Include your subject's environment





What NOT to do...





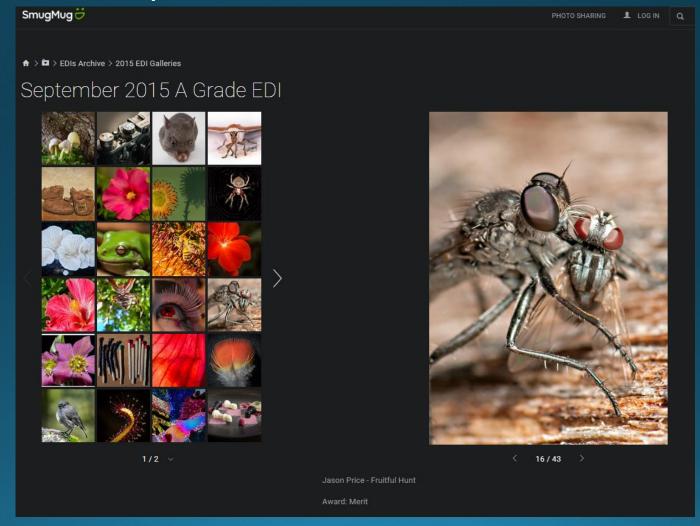


Macro Inspiration

WCC Workshops...

Macro Inspiration

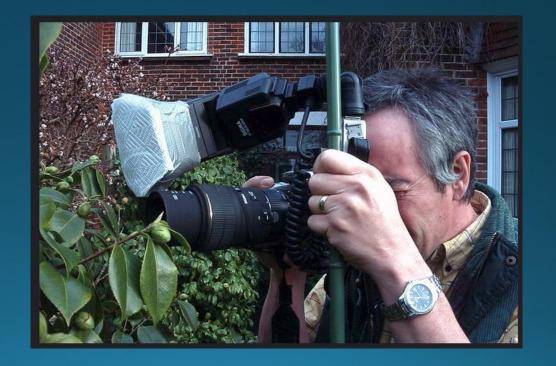
Previous WCC Comps (Jason Price)



Internet-Looking for live bugs









Caron Collective



Caron Collective



Canon Collective



Conon Collective