



BOGNOR REGIS
CAMERA CLUB

GETTING TO GRIPS WITH YOUR DIGITAL CAMERA PART 1-2

Cameras Don't Take Pictures
You do!

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EVOLUTION OF PHOTOGRAPHY



12
Exposures
6 are Awesome

36
Exposures
6 are Awesome

2,000+
Exposures
6 are Awesome

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THE CAMERA LIGHT RANGES

- Your eye has a dynamic range for light covering a 20 stop range (1:1,000,000)
- A decent DSLR has a dynamic range of 12+ stops (1:4,000)
- A Bridge camera can accommodate 8 - 10 stops (1:256)
 - Printing can display 5 to 6 stops (1:32 to 1-64)

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THE CAMERA LIGHT RANGES

Just launched

The Hassleblad **X2D 100C Body**



Back-Side Illuminated (BSI)
CMOS sensor
And can take 100MP stills
with a **15-stop** dynamic
range and ISO range of 64
up to 25600

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THE CAMERA LIGHT RANGES

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- A decent DSLR has a dynamic range of 12+ stops (1:4,000)
 - A Bridge camera has a dynamic range of 8 - 10 stops (1:256)
 - Printing can display 5 to 6 stops (1:32 to 1-64)
- A camera phone has a native dynamic range of 8 - 10 stops
 - But it processes one or more images to computationally increase that limit.

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THE CAMERA YOUR CONTROLS

How do you choose the settings you need to get
the exposure you want?

Shutter speed?

Aperture?

ISO?



THE CAMERA YOUR CONTROLS

What's ISO? You ask.

ISO is a post-exposure amplification of the intensity of light signal received by your camera.

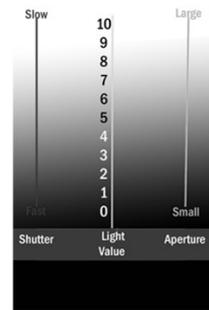
Plus

Brings your exposure choices in range

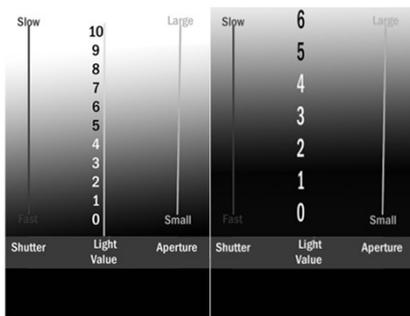
Minus

High ISO shows as noise in your images.

The Camera – What ISO does



The Camera – What ISO does



THE CAMERA YOUR CONTROLS

ISO – the simple guide

Keep it as low as you can to get your exposure choices in range.

Bright day – lowest setting on your camera

Dull day – ISO 400 to 800

Otherwise adjust to fit or use Auto ISO (if your camera has it)

then use Noise Reduction in post processing.

THE CAMERA YOUR CONTROLS PRACTICAL

How do you get to see what exposure is recommended by your camera?

How do you control the shutter speed?

How do you control the aperture?

Does the camera tell you if you have selected correctly?

THE CAMERA CHOSING YOUR APERTURE

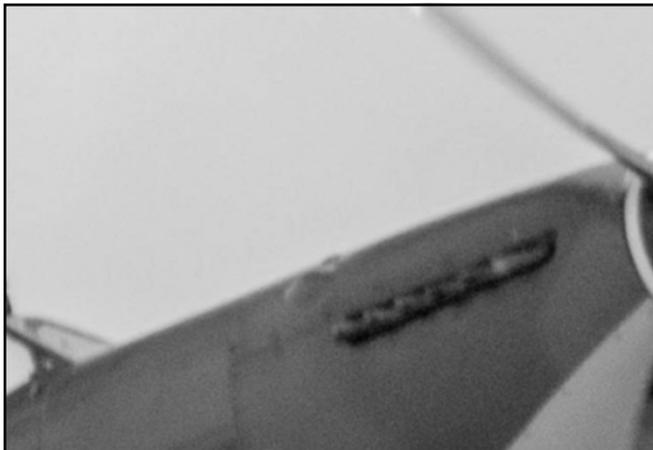
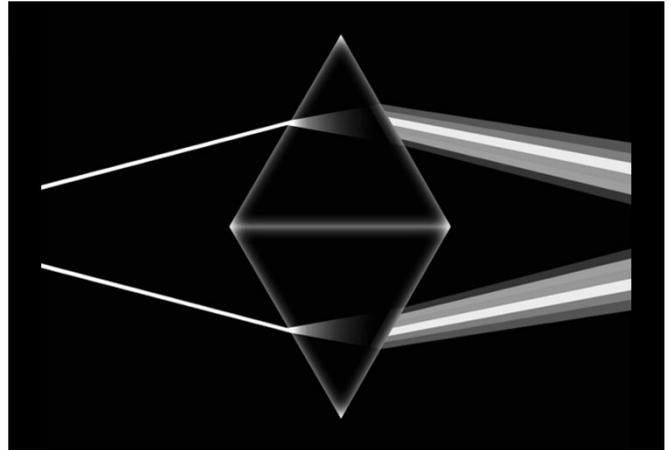
Why can't we always choose the widest aperture for more light?



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THE CAMERA – FOCUS, AN OVERVIEW

Why are lenses so complicated?
and why do they have so many bits
of glass



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FOCUS

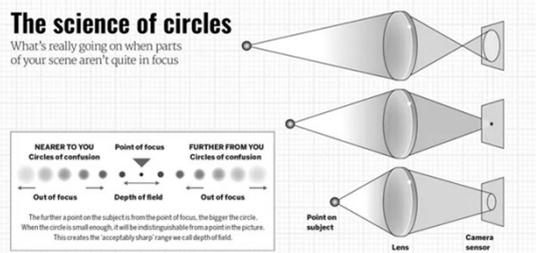
What does 'In Focus' actually mean?

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FOCUS

The science of circles

What's really going on when parts
of your scene aren't quite in focus



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FOCUS DEPTH OF FIELD

Image taken at f1.8
Shallow Depth of field
Background out of focus
Concentrates attention
on the subject,
not the environment





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FOCUS DEPTH OF FIELD

Image taken at f16
Large Depth of field
Focus point on the gate
Foreground to Background in focus
Leads the eye through to the subject,
and includes the environment.

It's your choice!



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THE SUBJECT – LIGHTING

“Light makes photography. Embrace light. Admire it. Love it. But above all, know light. Know it for all you are worth, and you will know the key to photography.”

George Eastman

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THE HOMEWORK

practice taking photo using Manual control of
shutter speed and aperture.

Homework #1

Take an egg and one (or more) light sources.

Take six different pictures showing how the different lighting shows off the egg's
shape.

Pop down to Boots and print them as 6x4 prints

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USING HDR IN CAMERA OR POST PROCESSING



