

Basics 6

Flash in the Pan

Ross Underwood

**THEN I TRIED
USING AUTOMATIC-**

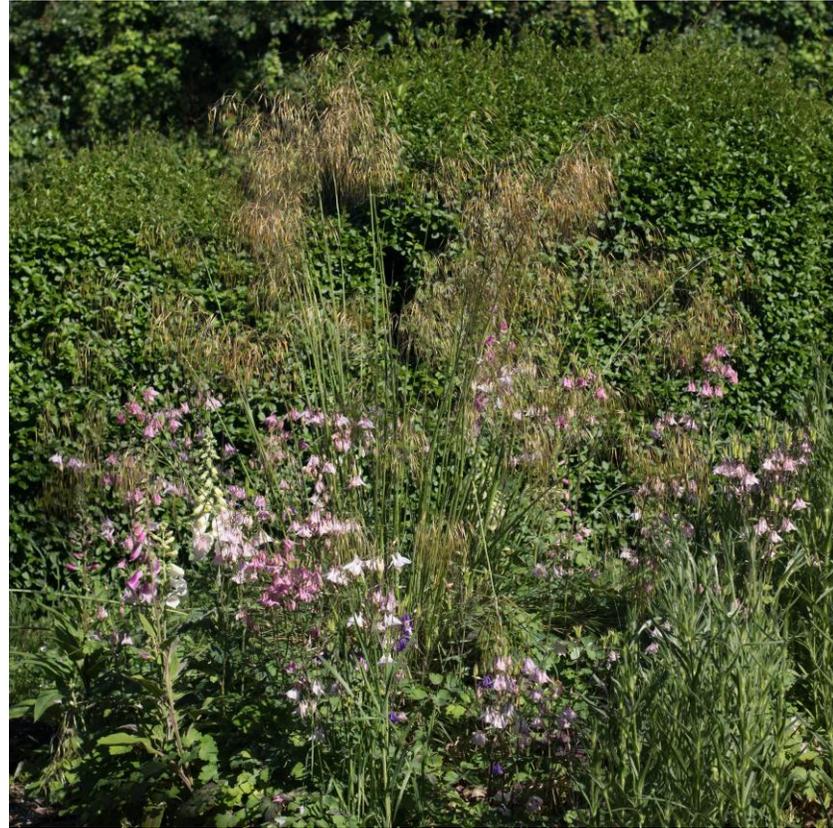
**REAL PHOTOGRAPHERS
USE MANUAL**



In search of great lighting!



Rising sun just off frame
behind and to left



Sun on my shoulder



Rain



Images taken less than 4 minutes apart



Pop Up Flash

My view is that 'Pop Up' flash produces

Horrible Horrible

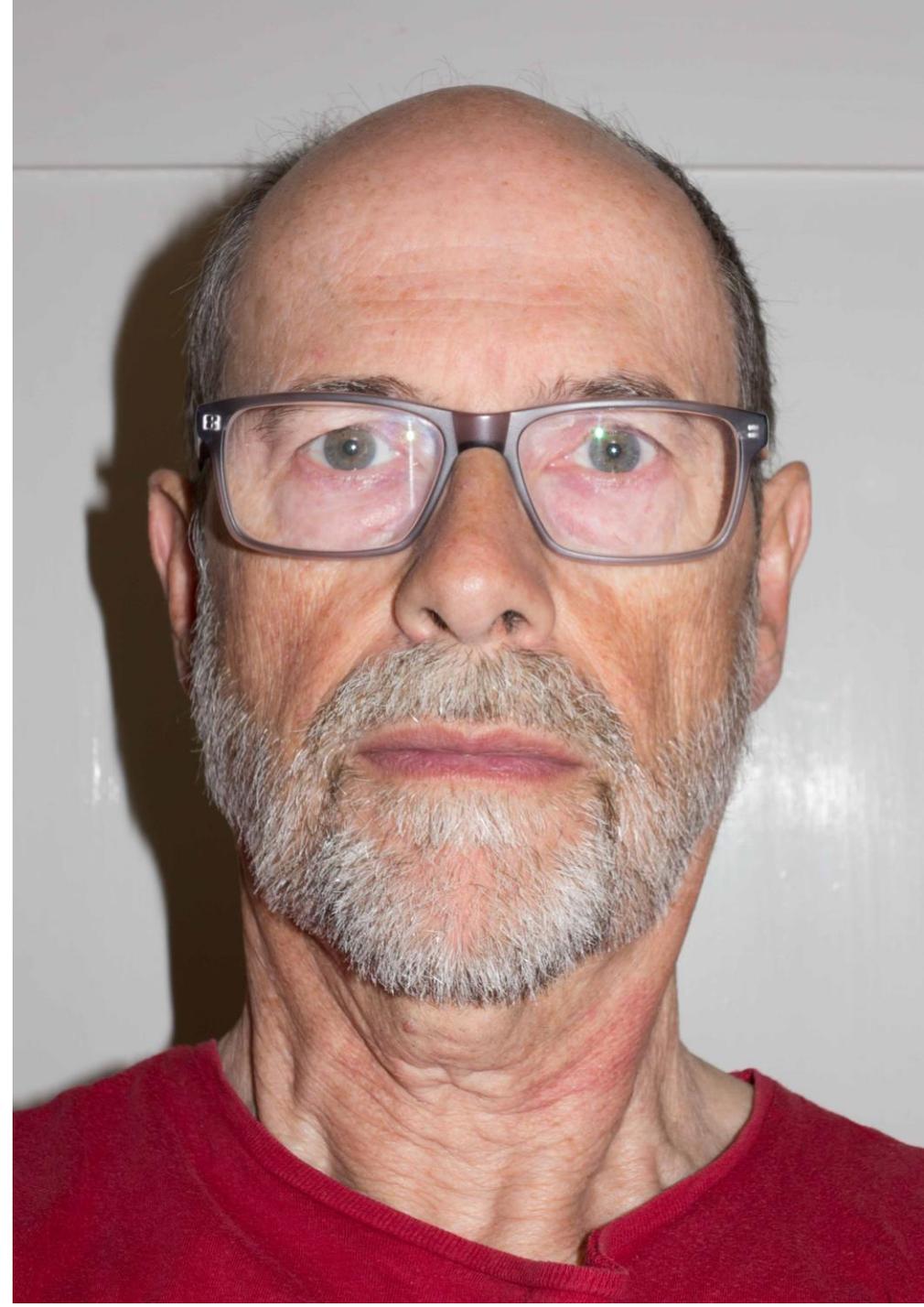
pictures

Subject against the wall:

Little modelling

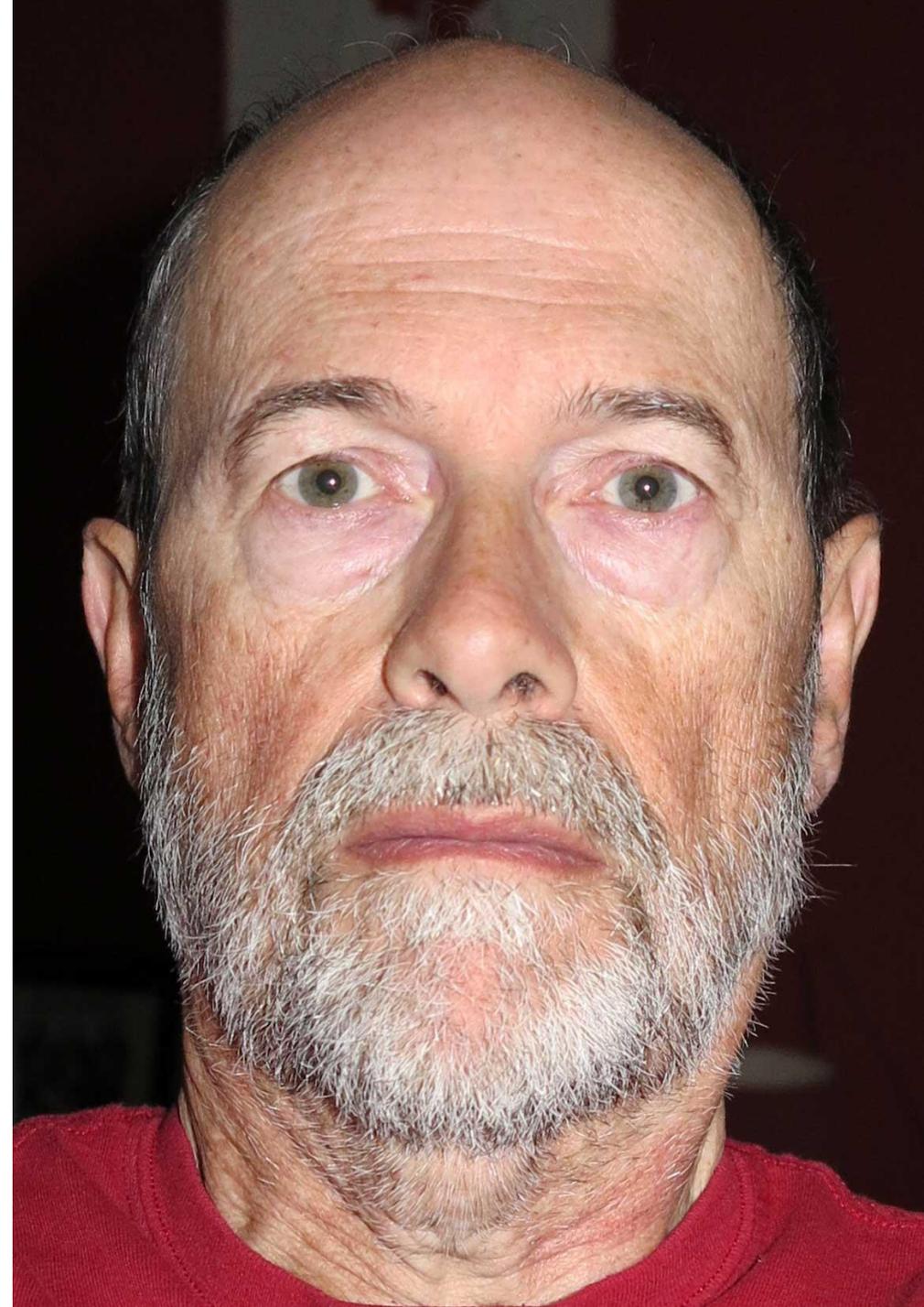
Harsh shadows on the wall

Shadow from the lens?



Subject away from the wall:

Same as above but add,
Darkened background
Frequently bleached out face



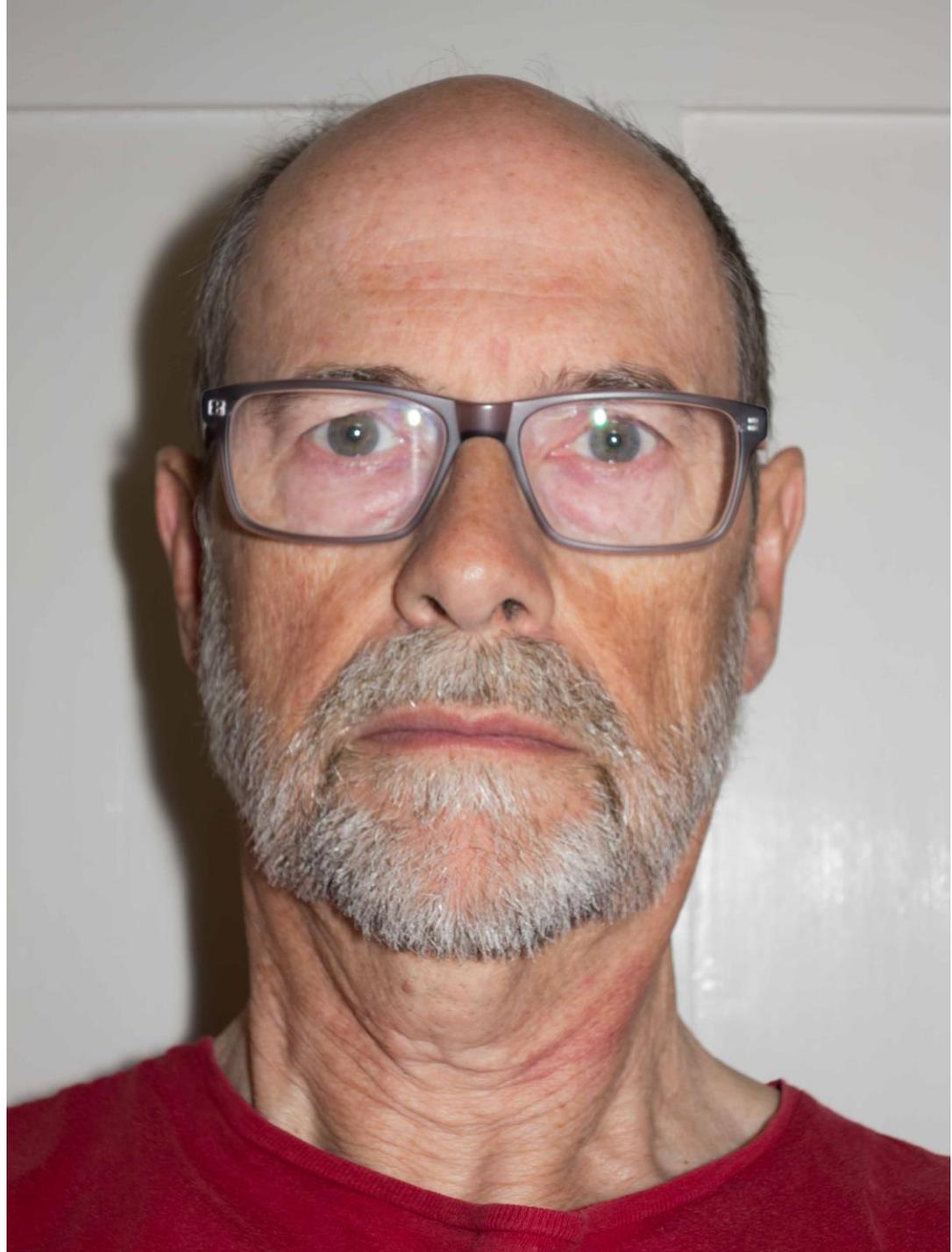
The dreaded red eye!



Pop up Flash:

You can use a **Diffuser** to soften the shadows

(the poor focus was down to me!)

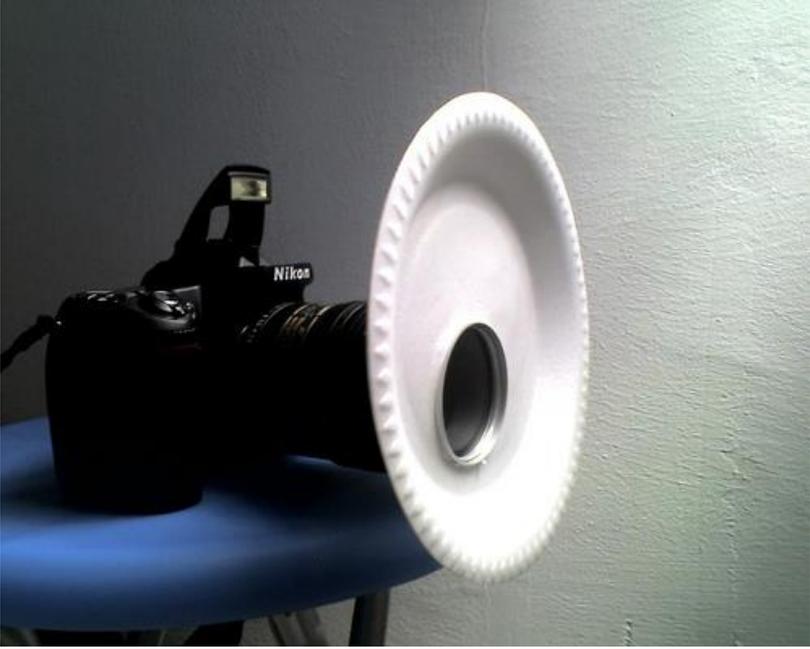


Pop up flash
diffusers

Proprietary



or Home made



Pop up Flash:

Bounce Flash off the ceiling

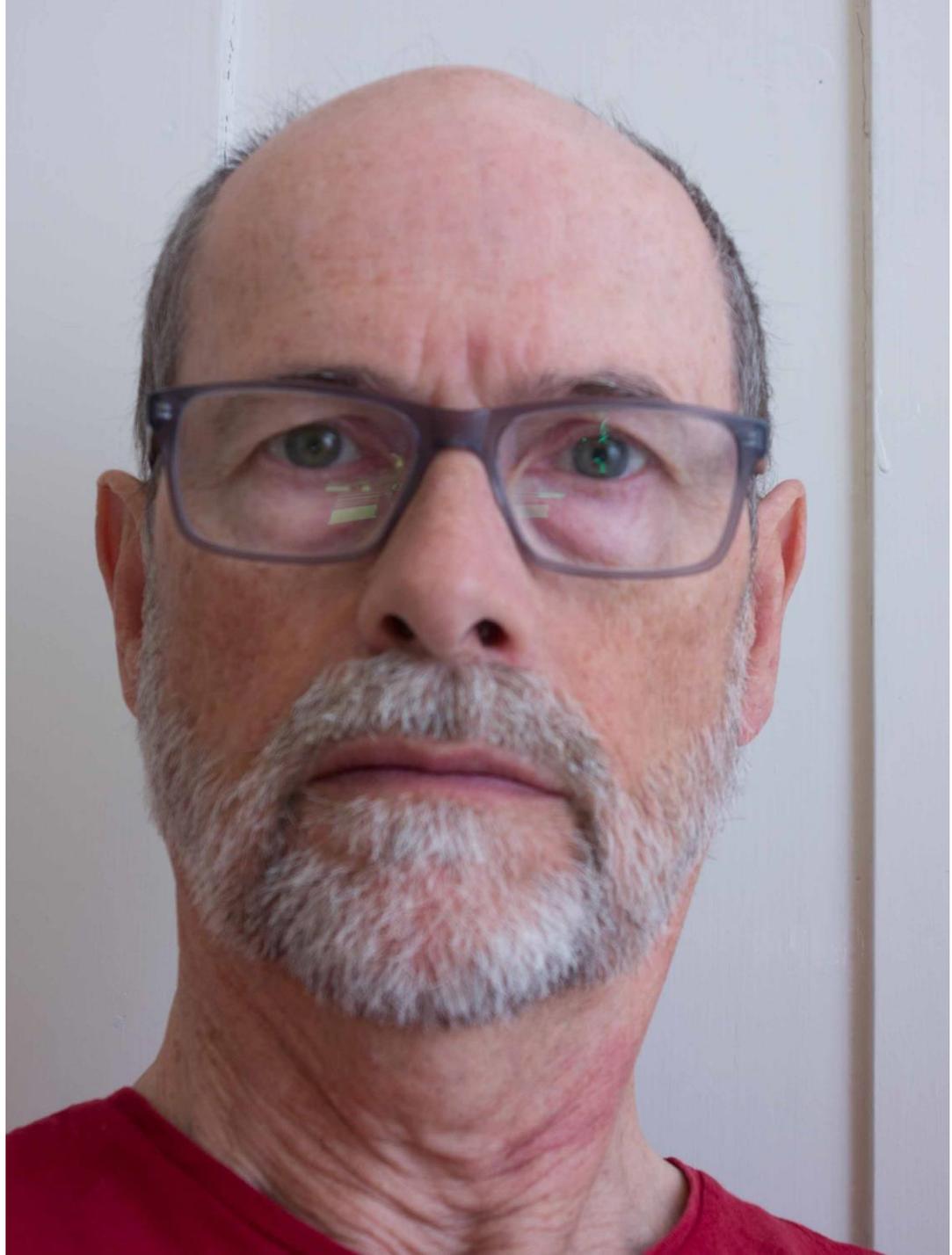
(I'm really not enjoying this!!)

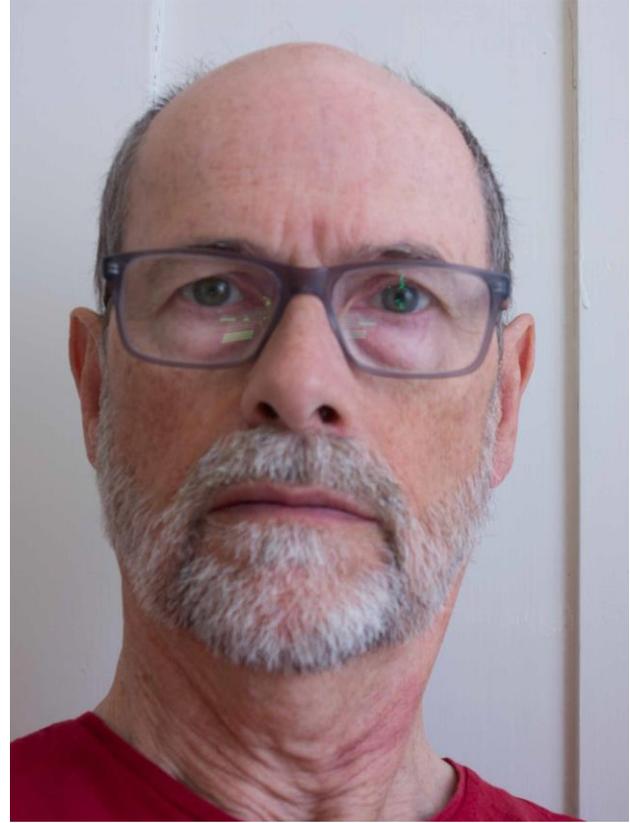
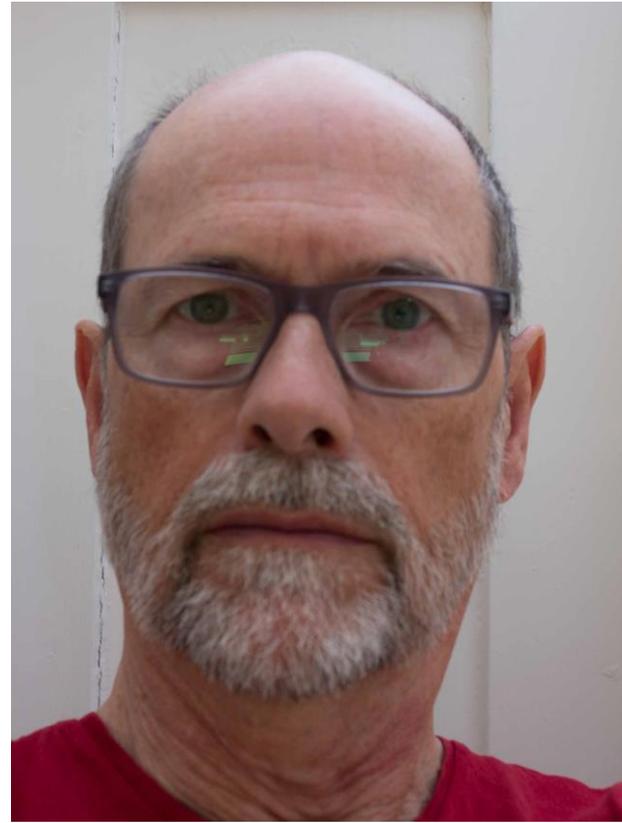
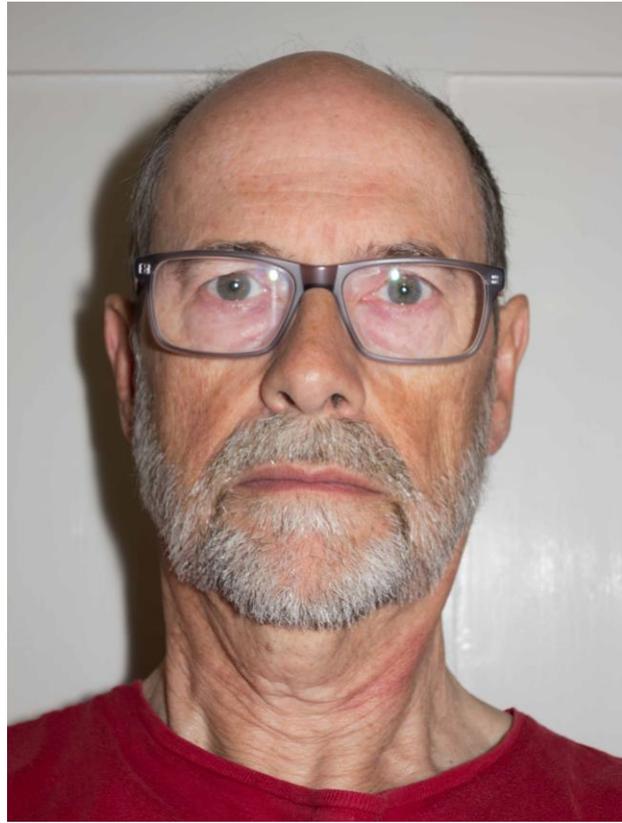
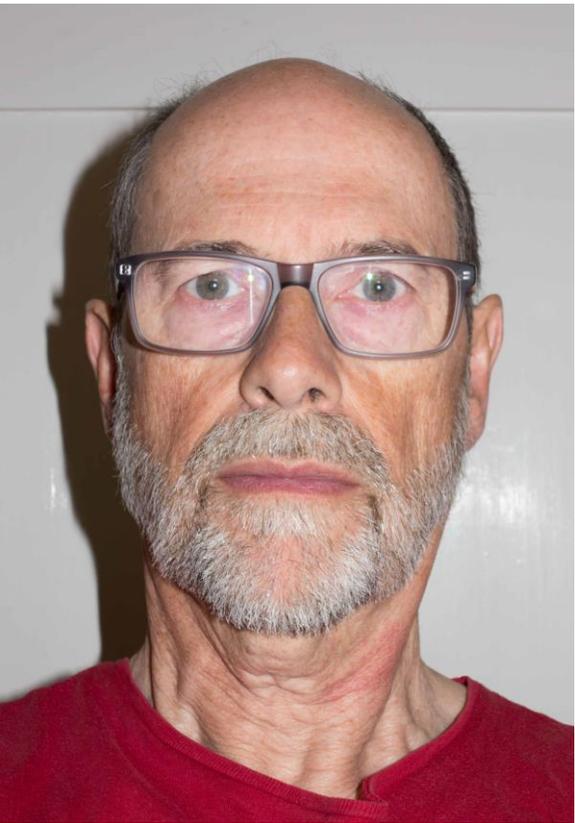


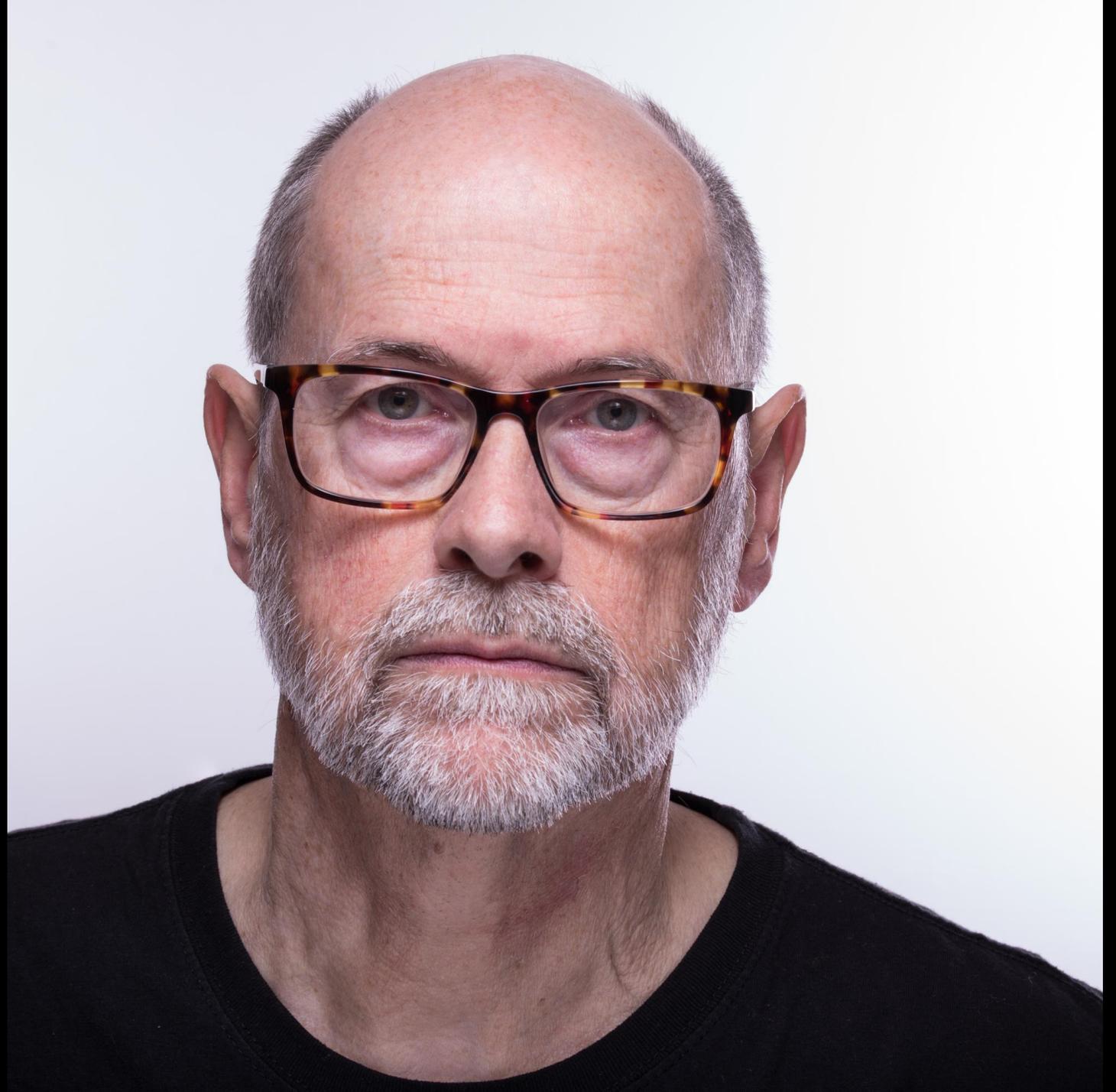
Proprietary mini mirrors to bounce flash



Pop up Flash:
Bounce flash off the wall







External flash

- Doesn't take power from camera battery
- Much more powerful than camera pop up
- Swivel head makes bouncing flash easier





External flash

Yongnuo YN600EX-RTII

- Guide Number (GN) of 60



External flash

Yongnuo YN600EX-RTII

- Guide Number (GN) of 60
- Divide GN by f stop to get range
 $60/5.6 = 10.7$ mtrs



External flash

Yongnuo YN600EX-RTII

- Guide Number (GN) of 60
- Divide GN by f stop to get range
 $60/5.6 = 10.7$ mtrs
- Automatic Zoom 24 -105
- Control flash from the camera menu
- 'Modelling' light



Studio Strobe



YN600EX-RTII

External Flash – light modifiers



Reflection Panel (for catchlights)



Wide-Angle Screen



Flash Diffuser Cover



Third Party Bounce Board



Radio Triggers allow the flash to do everything AWAY from the camera



Flash Techniques

Bounced Flash



Fill-in flash



Fill-in flash

Set background exposure



Fill-in flash

Set background exposure
Match this with the flash



- Use Shutter to regulate the ambient
- Aperture to regulate the flash



Problems

If part of the image is blacked out

Heidi



The shutter speed is too fast

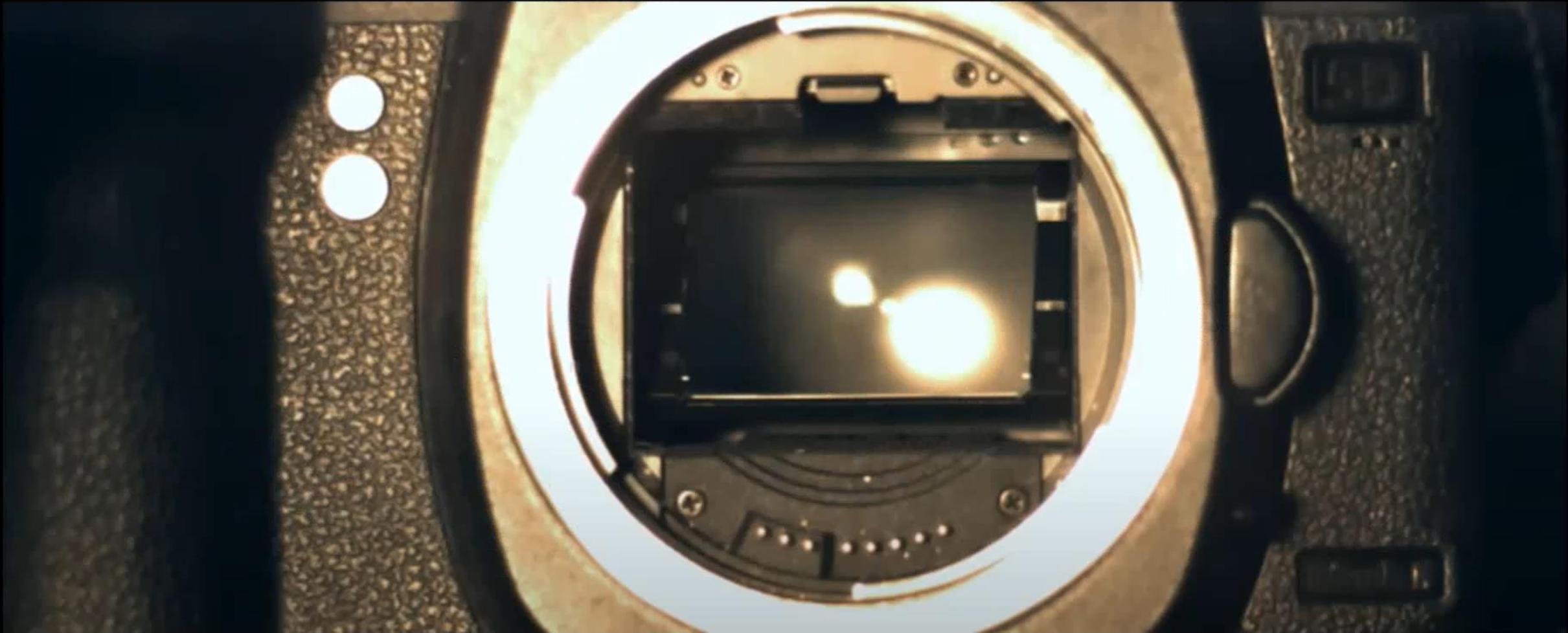


Keep below Maximum Sync Speed

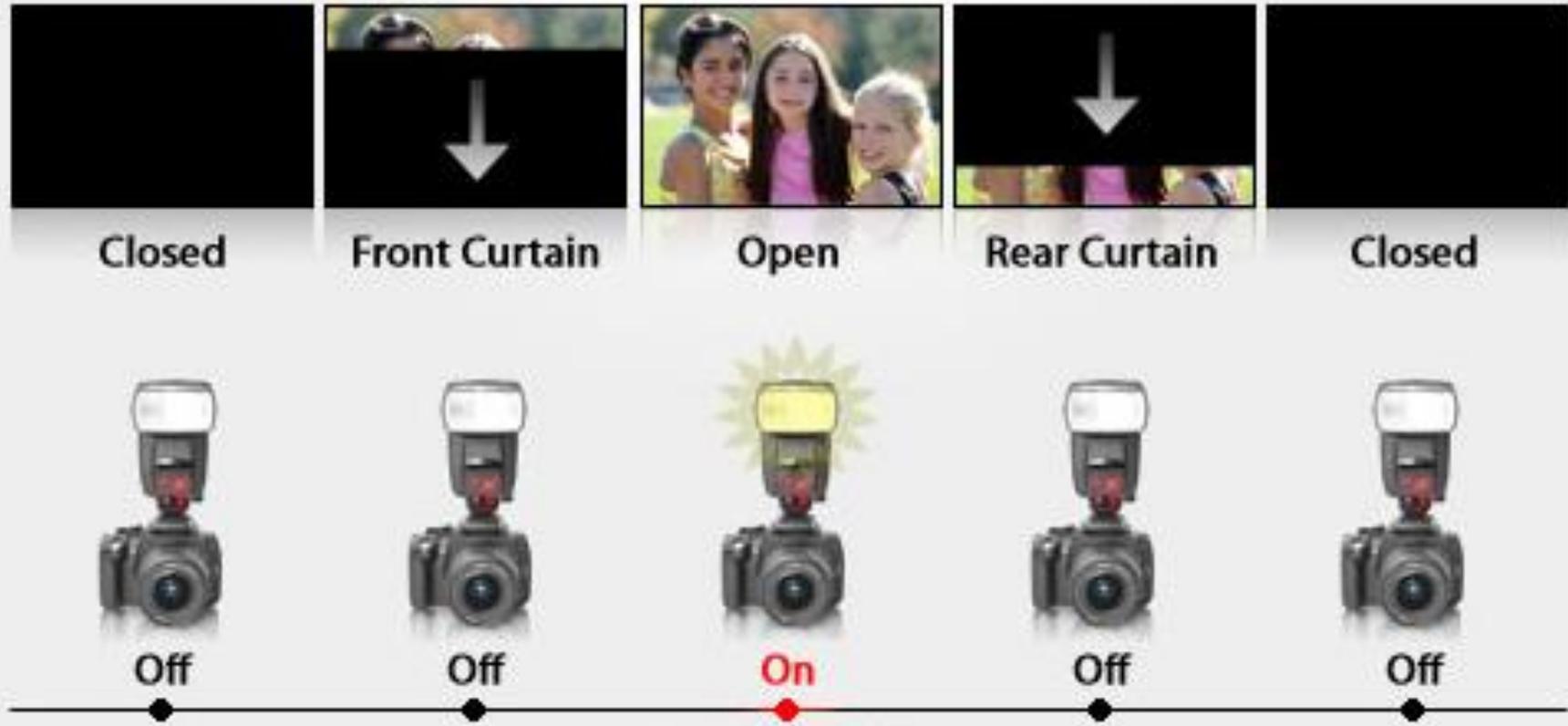




Regular speed

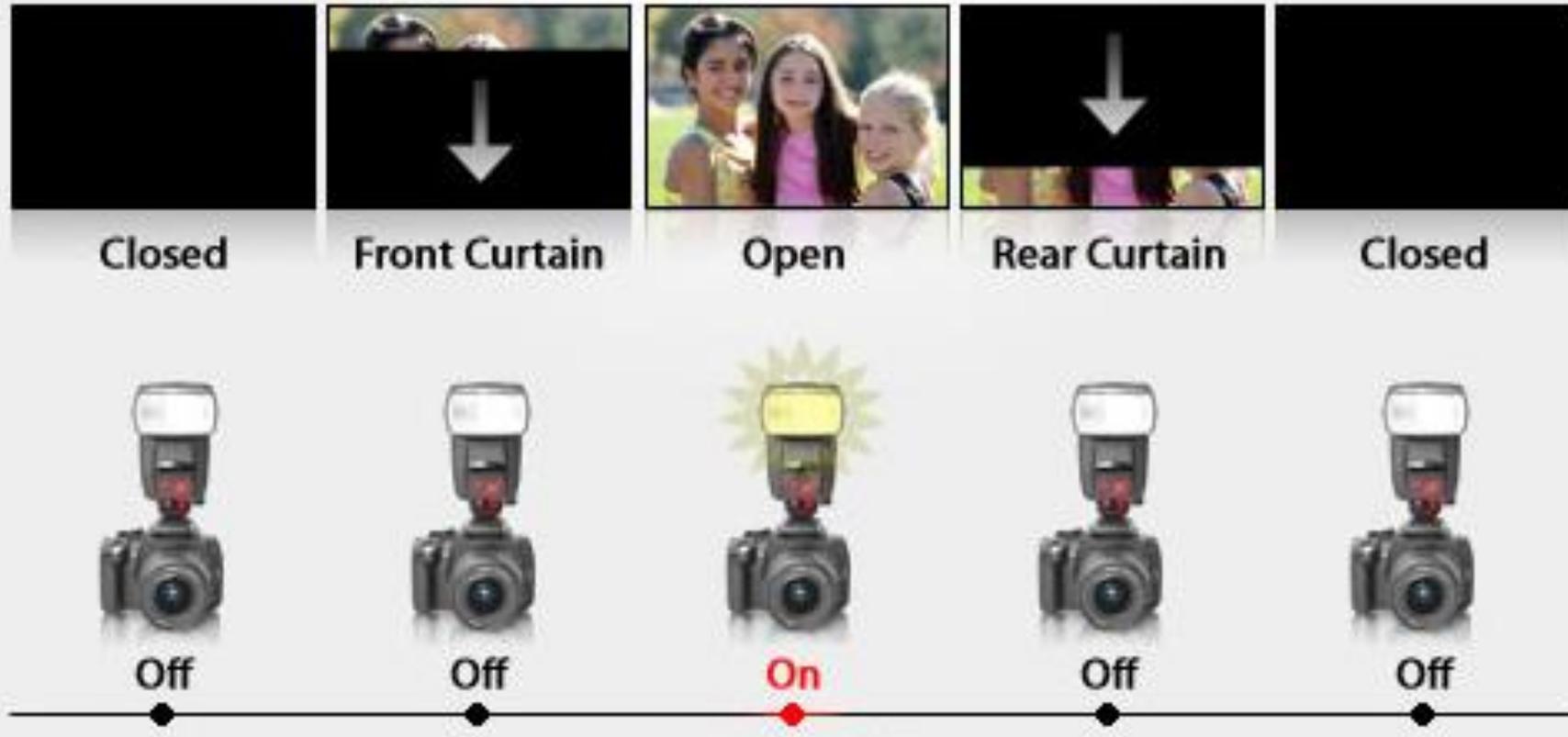


1/200 sec shutter speed



Courtesy: Exposure Guide

Maximum Sync Speed

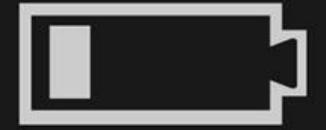


Courtesy: Exposure Guide

Maximum Sync Speed

Above this shutter speed the sensor is never completely uncovered

- Killing the batteries
- Long recycle time
- Over-heating problems



I'm tired.



- Killing the batteries
- Long recycle time
- Over-heating problems

Raise the ISO and run the flash on half power or less





30 sec, flash not fully recycled



Flash recycling takes longer as batteries fail



50 sec

Frances

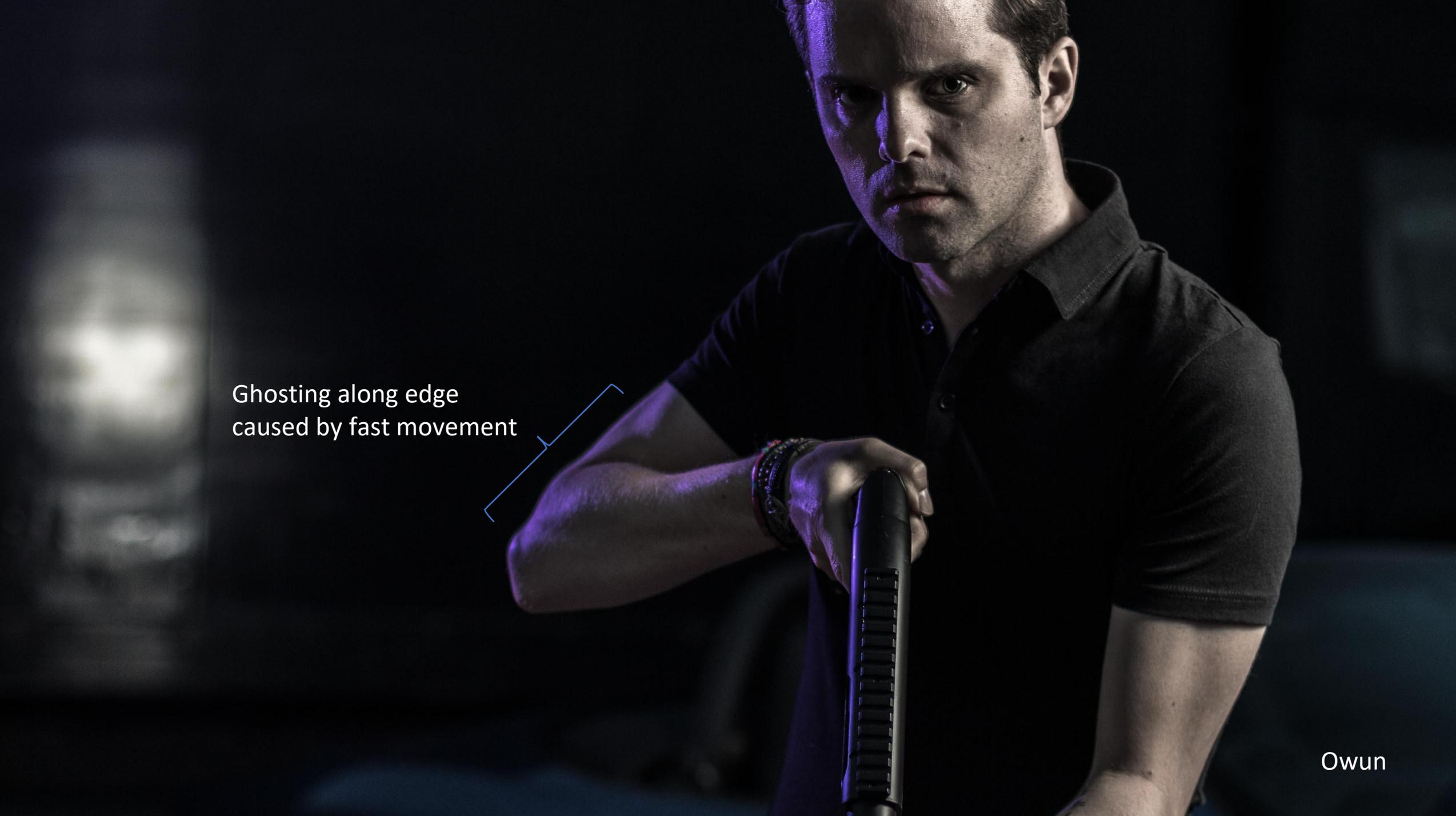
Battery Pack



Ghosting



Owun

A man in a dark polo shirt is shown from the chest up, holding a black handle. He is looking intently at the camera. A blue light effect is visible on his arm and the handle. A ghosting artifact is present on the left side of the image, appearing as a faint, semi-transparent duplicate of the man's arm and handle. A blue bracket points from the text to this ghosting artifact.

Ghosting along edge
caused by fast movement

Ghosting around the edge?

Use LOW power flash



On high power, the flash is:

LONGER not

STRONGER!



Two or more **speedlites** open new opportunities.



Two or more **speedlites** open new opportunities.

Individual Radio Control



Two or more **speedlites** open new opportunities.

Individual Radio Control

Cheaper models use slave

Gels to add, or correct, colour



Amanda is Deanerys Tageryen



Miami Vice
with Owun
Amanda
Taha





Flash Modes



Yongnuo YN600EX-RTII

Modes:

Manual

– Set everything yourself

Multi

– Strobe /pulses of light

ETTL

– Evaluative Through The Lens



– Second Curtain Sync

HSS

– High Speed Sync

Modes:

1 - Manual

- Single light set up
 - Flash with broolly
- Sort out the power
- Bring in your subject



Marilyn

Three flash set up

Francesca



Modes:

2 - Multi (Strobe)

Strobe speed can be set faster or slower





3 - E TTL (Evaluative Through The Lens)

- The flash fires a test shot and camera assesses the amount of light reaching it



3 - E TTL (Evaluative Through The Lens)

- The flash fires a test shot and camera assesses the amount of light reaching it
- The flash then fires corrected amount of light for the actual photograph

You can put everything on
AUTO and take the picture





4 - Second Curtain Sync

Ghosting used creatively

Slowing the shutter speed

Courtesy: Exposure Guide



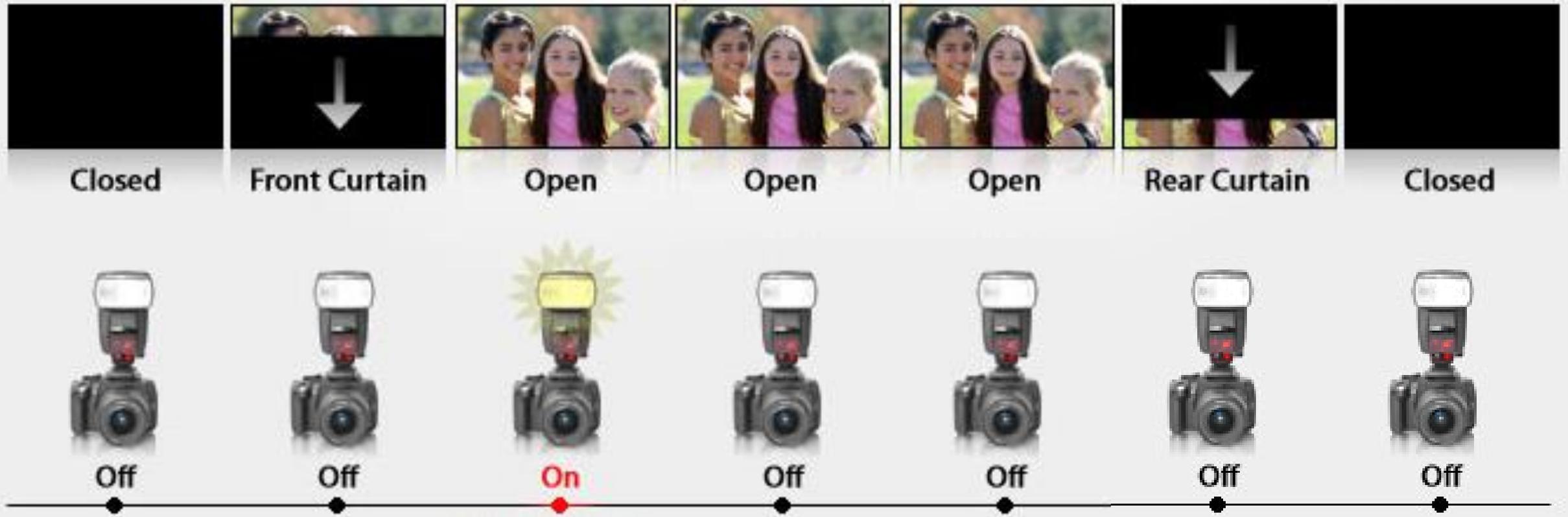
4 - Second Curtain Sync

Ghosting used creatively

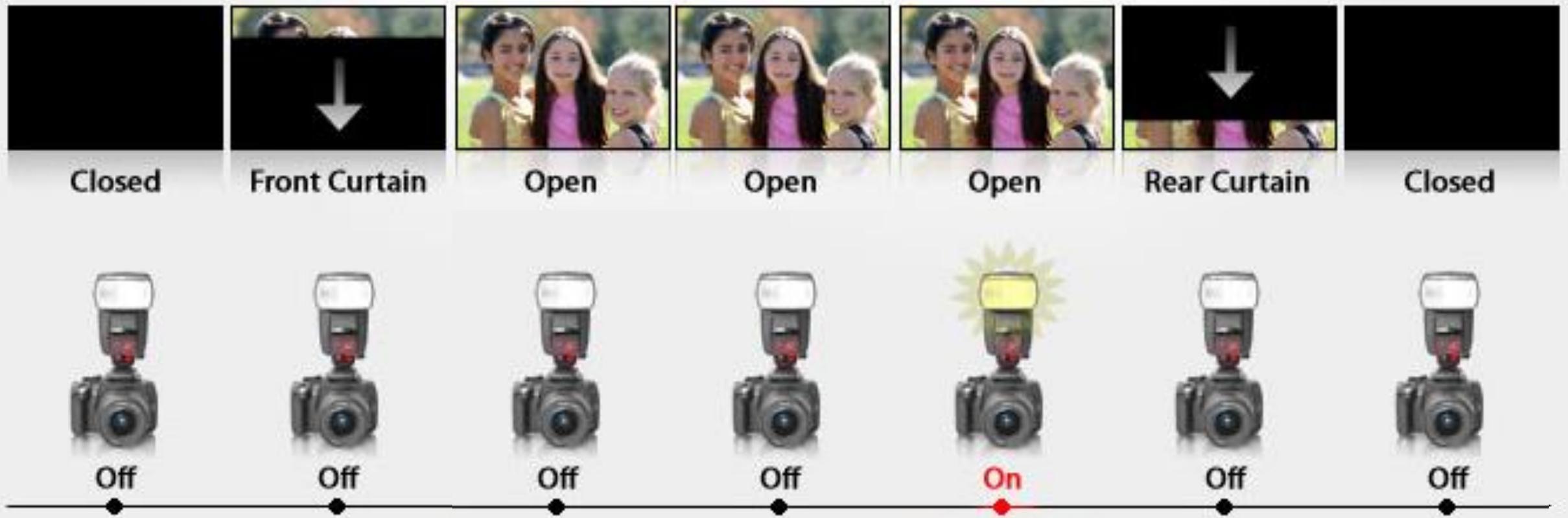
Slowing the shutter speed

But the trail is in front rather than behind!

Courtesy: Exposure Guide



The flash normally fires with the **Front Shutter Curtain** (1st curtain)



In this case you want the flash synced with the **Rear Curtain** (2nd Curtain)

This gives the trail
behind the moving ball







Joel Grimes

Lens	24 – 70 mm zoom set at 24 mm
Aperture	f2.8 to put the background out of focus
ISO	100
Filter	Neutral Density (6 stop) to darken the background in full sunshine
Light /Modifier	Flash /Softbox , 36 x 48 inch
Post production	Right hand side stretched to move subject off centre



Joel Grimes

Exposure based on the **Sunny Sixteen Rule**, f16 – ISO 100 – shutter 1/100th

- To underexpose the sky by 2 stops = shutter speed now 1/400th
- Open up to f2.8 (5 stops more light) needs faster shutter at 1/12800th (5 stops less light)
- But the shutter speed only goes up to 1/8000th!
- Six stop neutral density filter brings it down to 1/200th
- Now set the flash for f2.8 plus six stops = f22

easy as that!!!



In these pictures Joel wanted - Shallow depth of field (f2.8 and f1.4)

- But this would send the shutter speed above the camera's Maximum Sync Speed

In these pictures Joel wanted - Shallow depth of field (f2.8 and f1.4)

- But this would send the shutter speed above the camera's Maximum Sync Speed
- So he used a 6 x Stop Neutral Density Filter for Darking the sun!

The only problem with a 6 stop neutral density filter:

You can't see through it!

5 - High Speed Sync

1/5000th, f1.4, ISO 50, silver broolly

Frances



5 - High Speed Sync

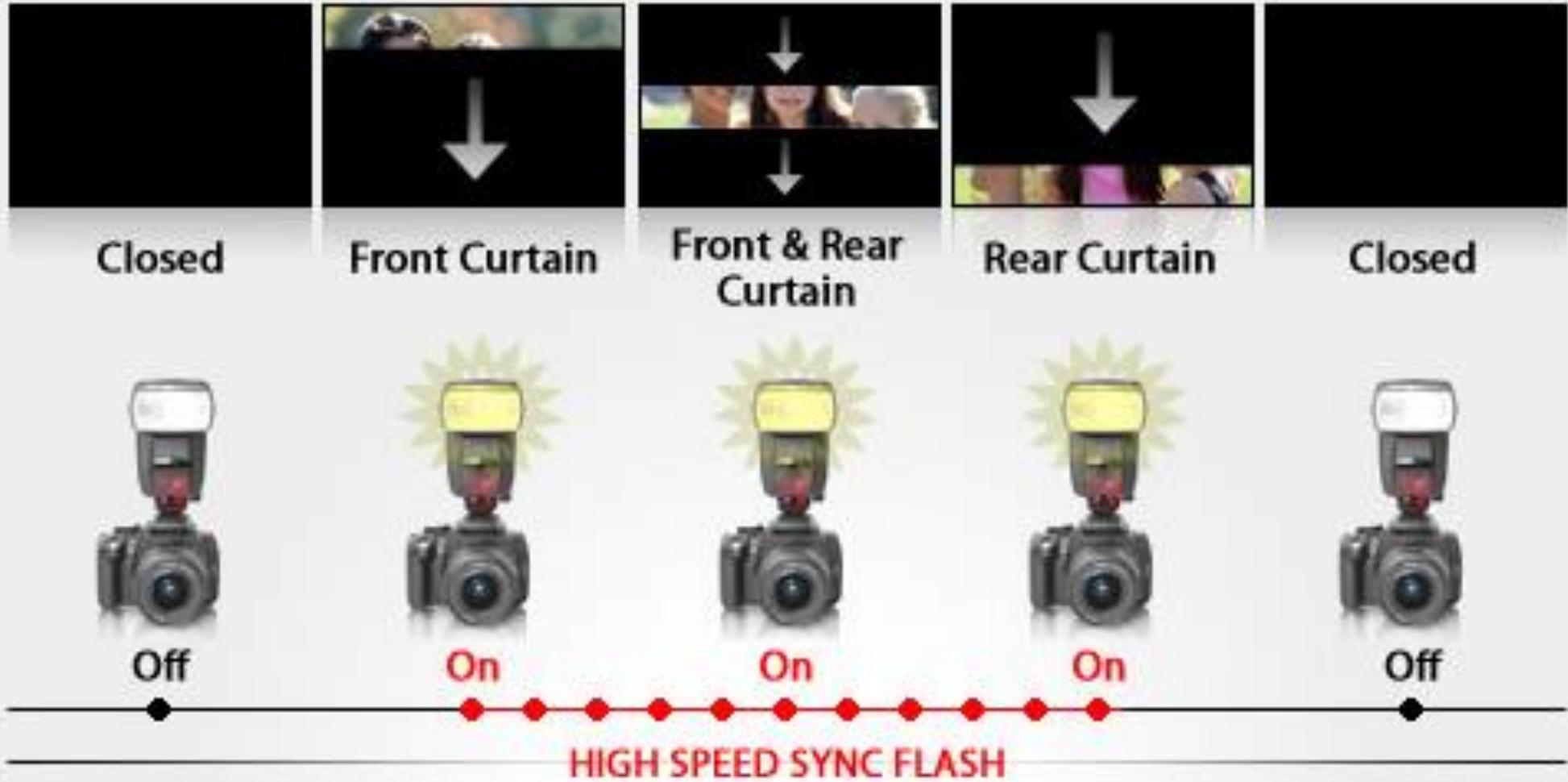
1/5000th, f1.4, ISO 50, silver brolly

The Judge gave me 6.5 /10!

Frances

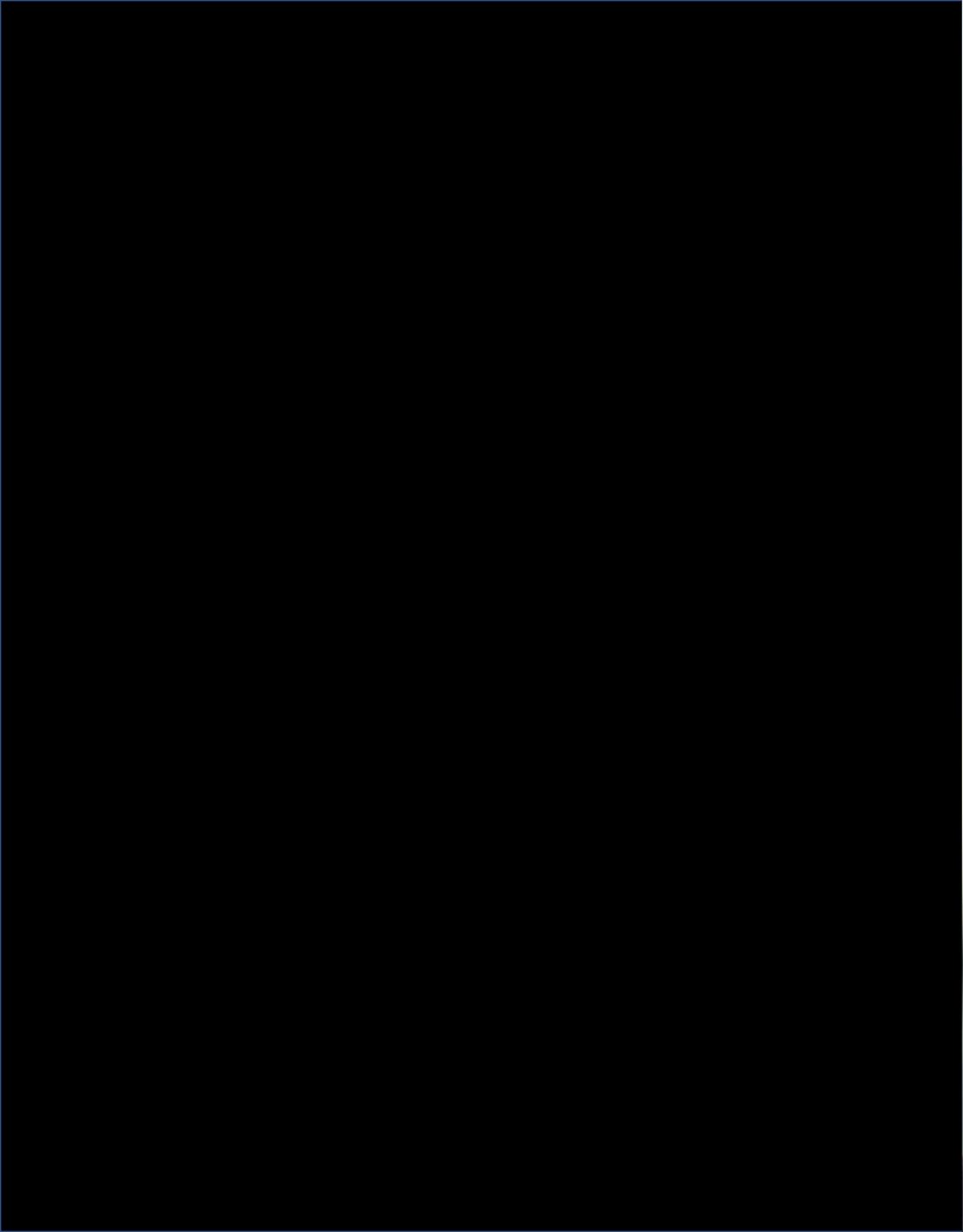


FAST SHUTTER SPEED





Shutter 1/6400
Lens 50ml at f1.4



Other Features

- Auto Focus Assist
- Flash Exposure Bracketing
- Flash Exposure Lock
- High-Speed Continuous Shooting



Press **Depth of Field Preview Button**
and your flash will strobe



Kieron and Emily

Press **Depth of Field Preview Button**
and your flash will strobe

Use very sparingly out of
consideration of your model!!!



Kieron and Emily

Neat Tricks!

High Speed Sync for Studio Lights

This picture was taken using a HSS speedlite to trigger studio lights



Courtesy: The Slanted Lens

High Speed Sync for Studio Lights

This picture was taken using a HSS speedlite to trigger studio lights

The **Dwell** of the studio light is long enough to light the scene uniformly



Courtesy: The Slanted Lens

High Speed Sync for Studio Lights

This picture was taken using a HSS speedlite to trigger studio lights

The **Dwell** of the studio light is long enough to light the scene uniformly

This works with my cheapy studio strobes



Courtesy: The Slanted Lens

Taken with a HSS speedlite
and two manual flashes





???

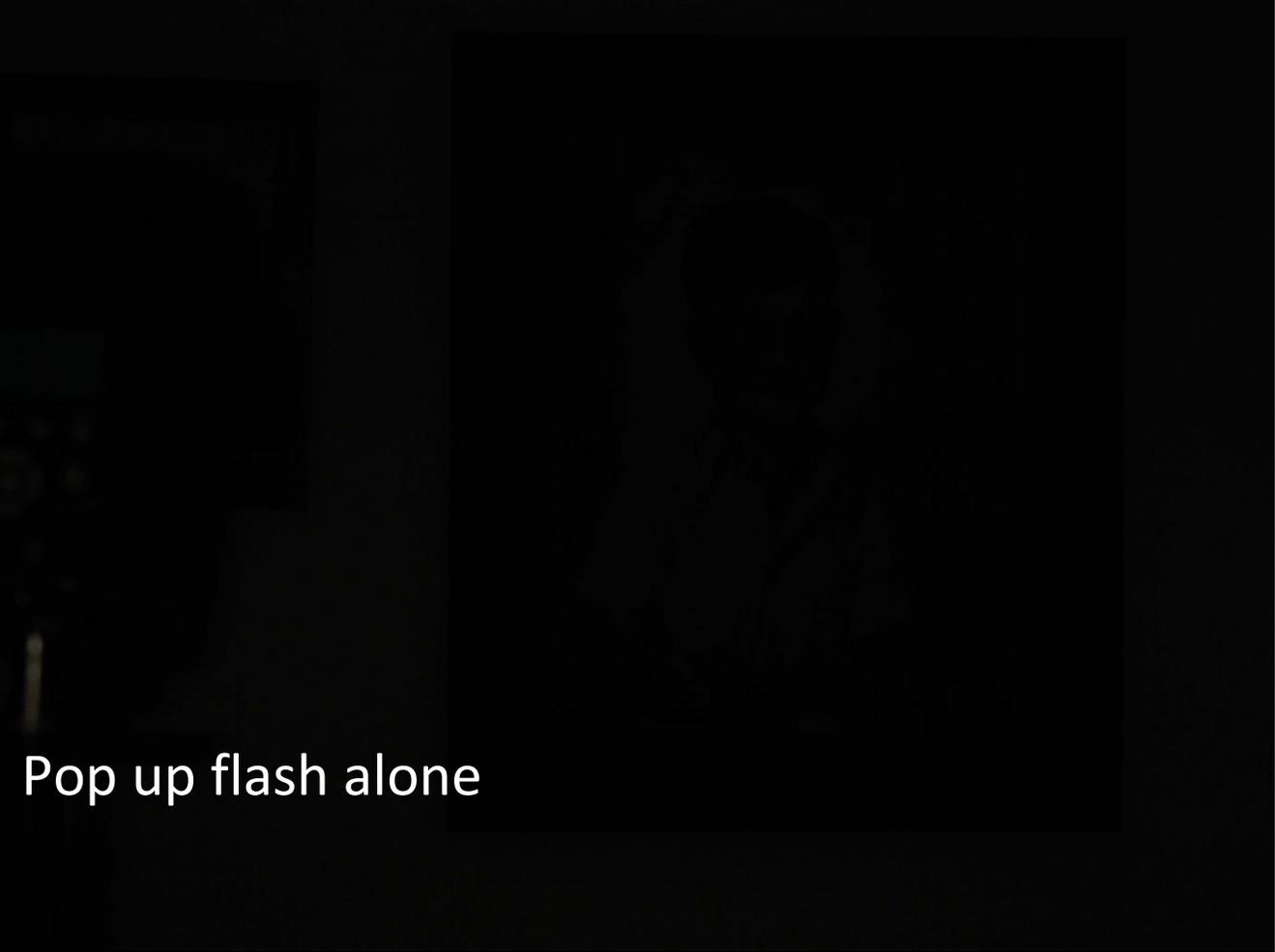
Canon G1X syncs up to 1/4000th sec!!



Canon G1X syncs up to 1/4000th sec!!

and it will trigger a manual flash to give
a good exposure





Pop up flash alone

ISO 200, f5.6,
1/1600th

Pop up flash alone

ISO 200, f5.6,
1/1600th



With manual
speedlite



Speedlites

by Ross Underwood & Nic Drew

Thank you

Questions?

Links to further learning (where I cribbed it all from!!!)

- AdoramaTV – Gavin Hoey <https://www.youtube.com/user/adoramaTV>
- Creative Live Free – Sue Bryce, Lindsay Adler, Mark Wallace, Joel Grimes
<https://www.creativelive.com/>
- Jason Lanier <https://www.youtube.com/watch?v=7unqGT0VsH4>
- YouTube in general – avoid anything that starts ‘Howdy Doody’
<https://www.youtube.com/>
- Others on YouTube: Tony & Chelsea Northrup, The Slanted Lens, Arthur Morris (birds)