

Sony A1 Settings

For Wildlife Photography



Shooting Menu

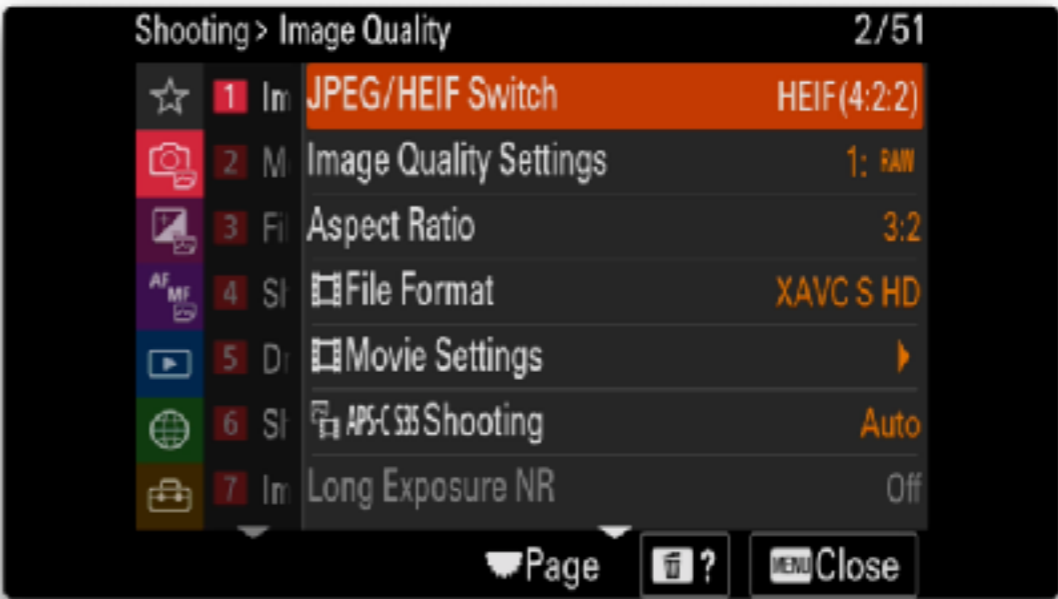
Shooting

Key Settings

JPEG/HEIF: HEIF

IMAGE FORMAT: RAW ONLY

RAW COMPRESSION: COMPRESSED



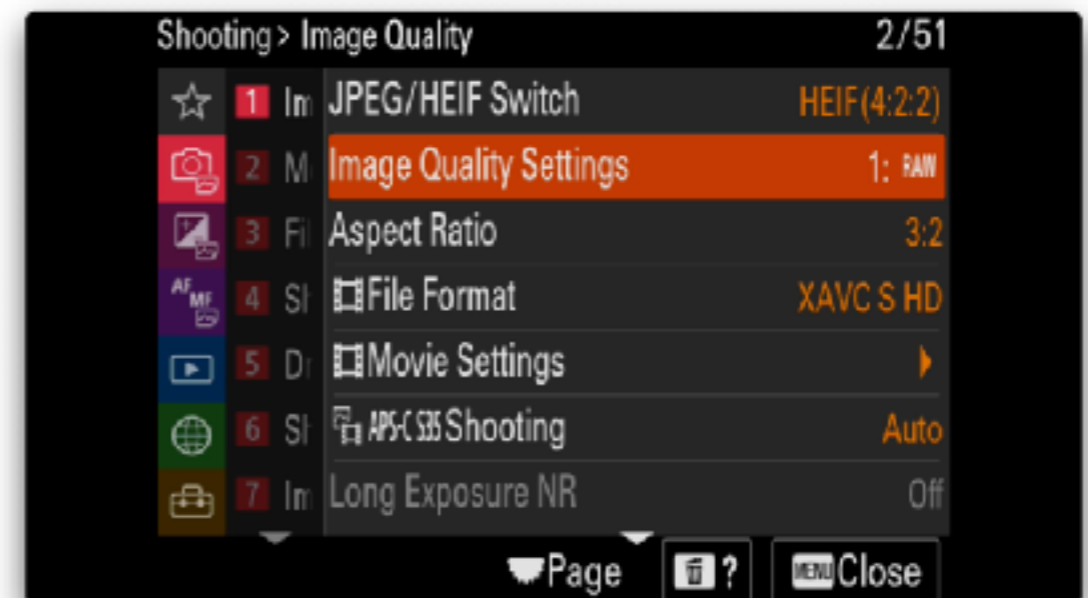
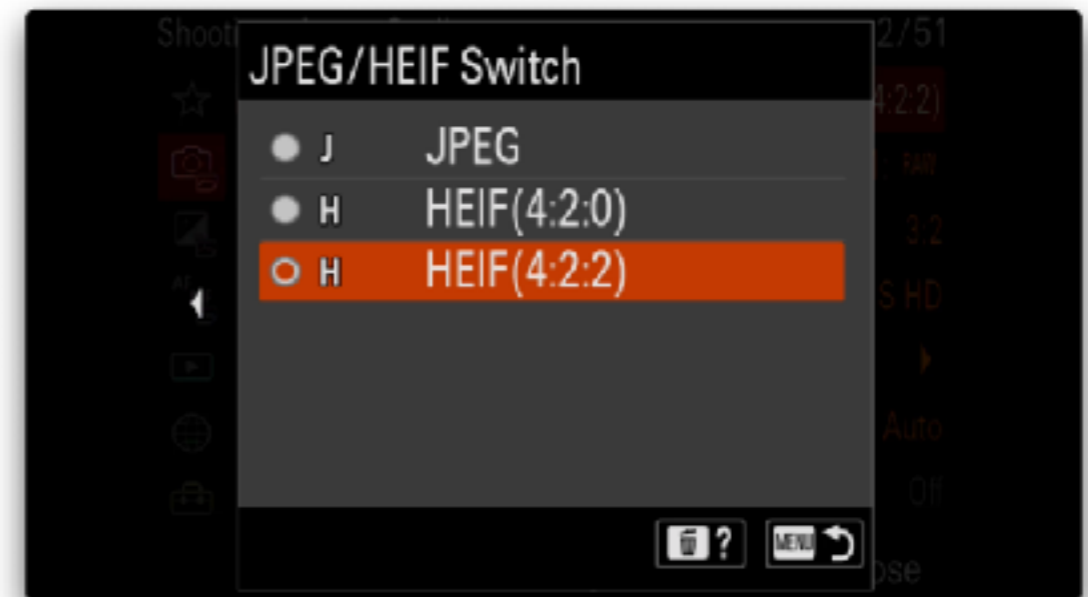
Shooting Menu - Image Quality

JPEG/HEIF

- JPEG is universally compatible
- HEIF offers better quality and compression but may not be supported by all software and platforms

File Format

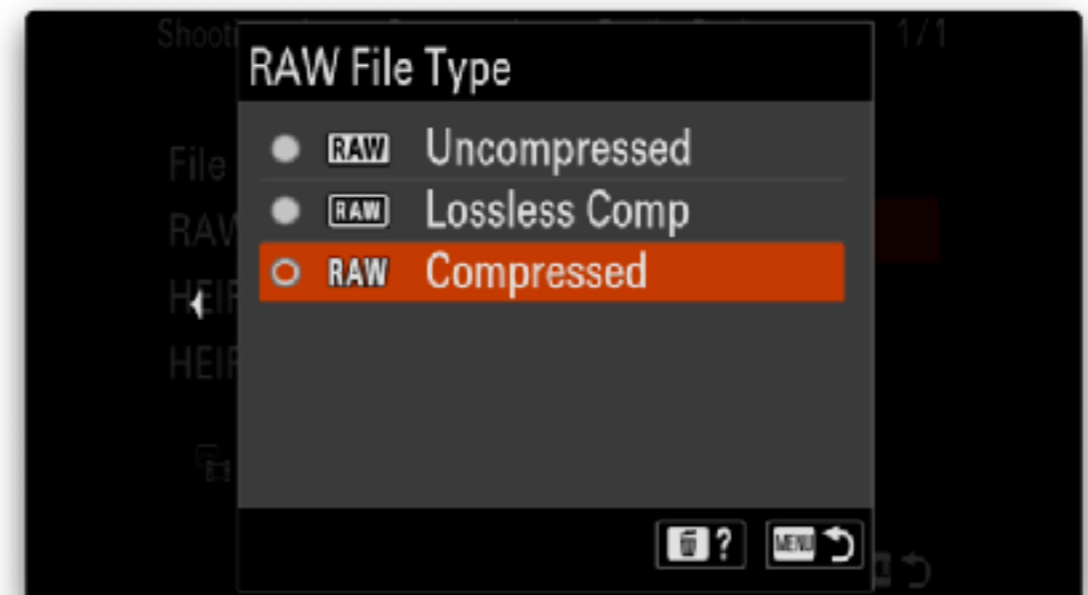
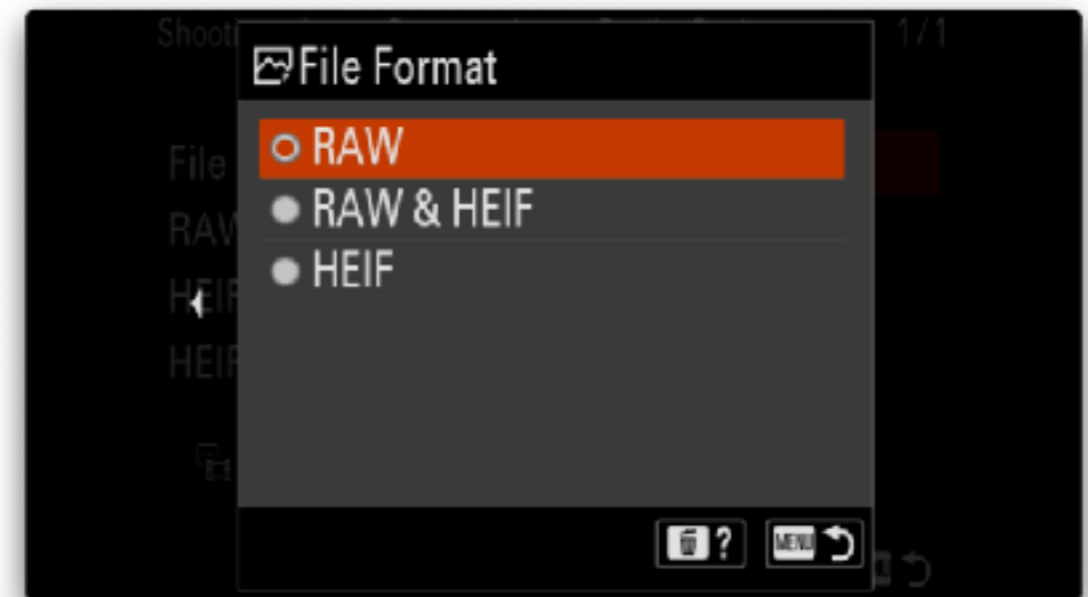
- RAW only to reduce capacity



Shooting Menu - Image Quality

RAW File Type

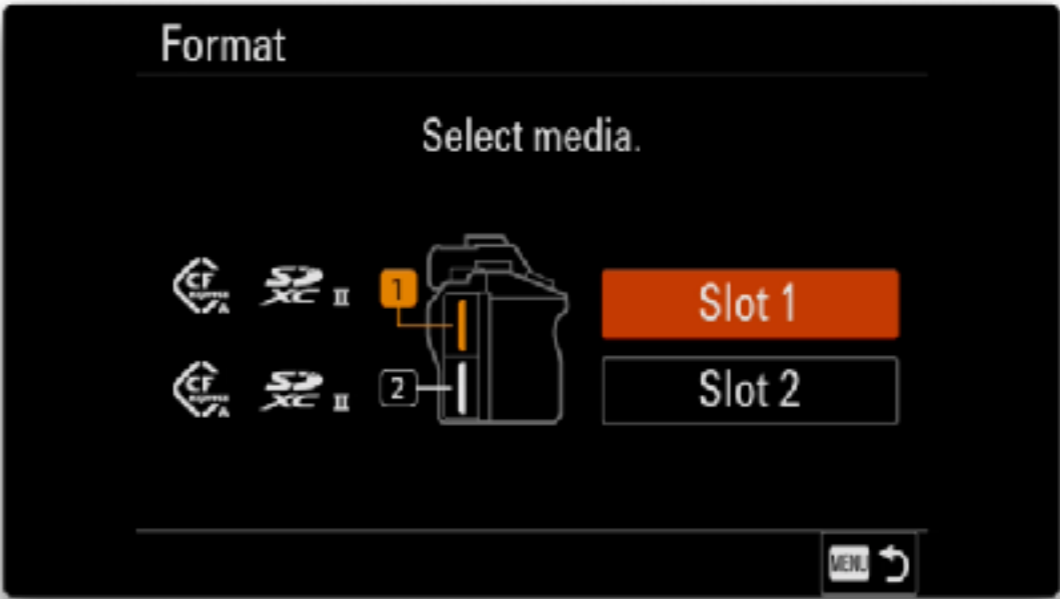
- Compressed - shooting at 30FPS is not possible if Uncompressed or Lossless Compressed is used
- Use Lossless Compressed if possible e.g. stills etc.



Shooting Menu - Image Quality

Media Format

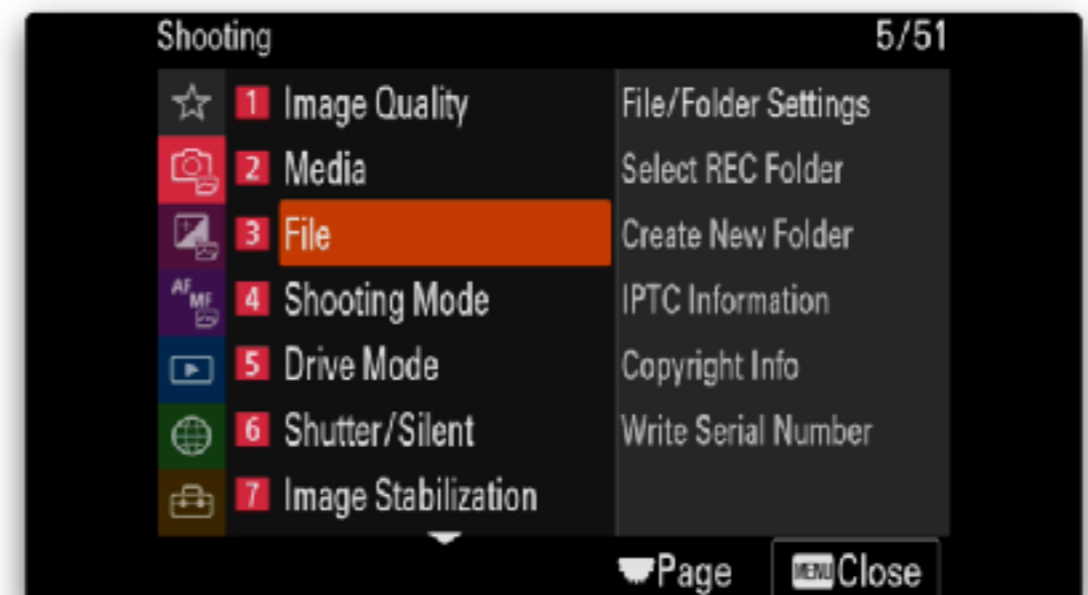
- Use this to format memory cards



Shooting Menu - Image Quality

Recording Media Settings

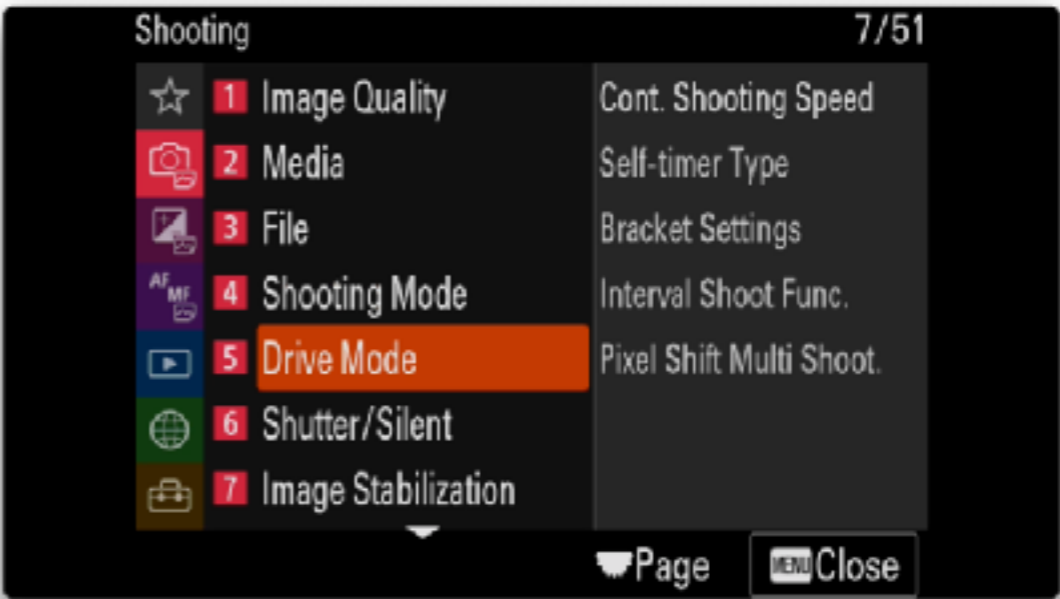
- Record Images to Slot1
- Record Video to Slot2 - to avoid using up space for images on Slot1
- Set Auto Switch to On so if Slot1 becomes full the camera will automatically start using Slot2



Shooting Menu - Image Quality

Shooting Mode Settings

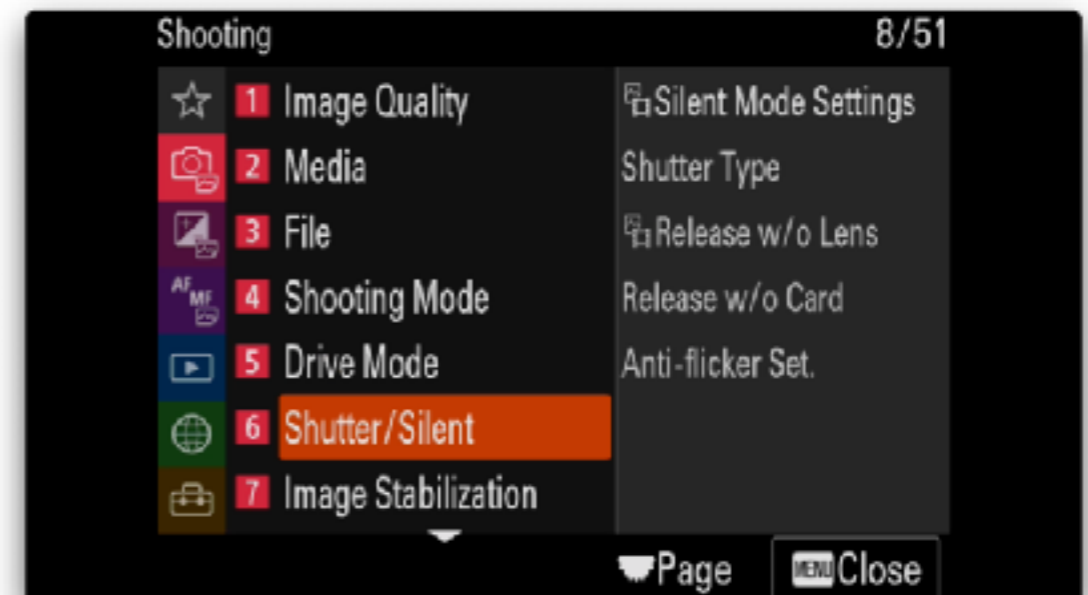
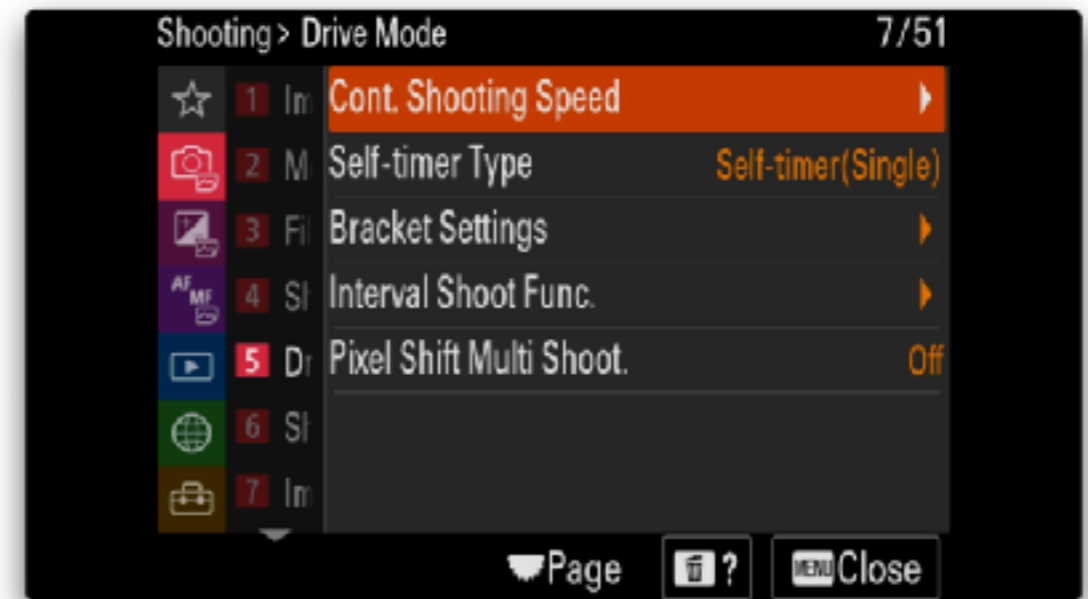
- Nothing to see here



Shooting Menu - Drive Mode

Continuous Shooting Speed

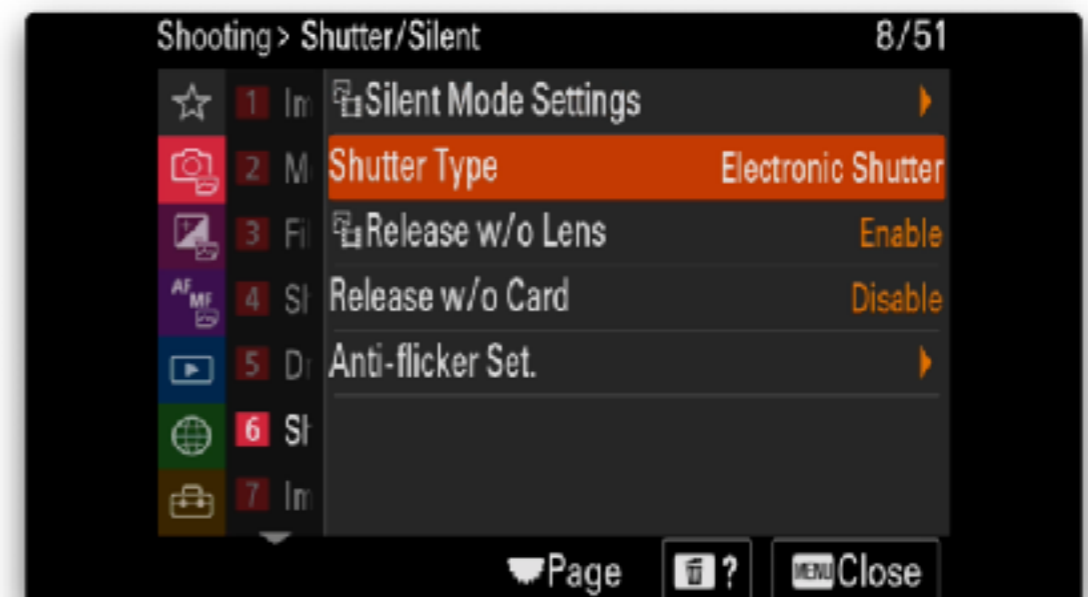
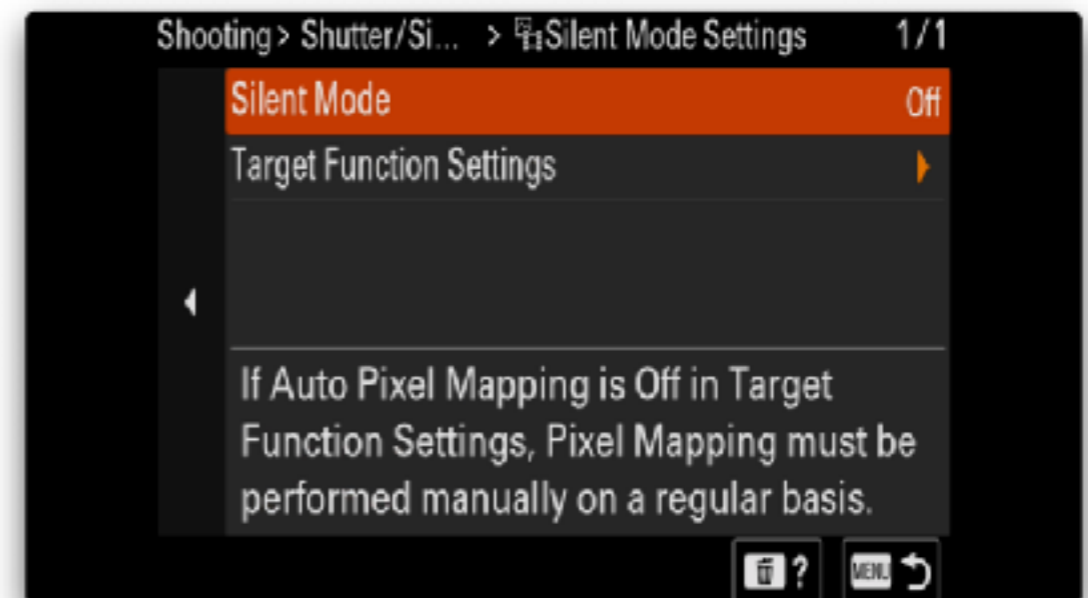
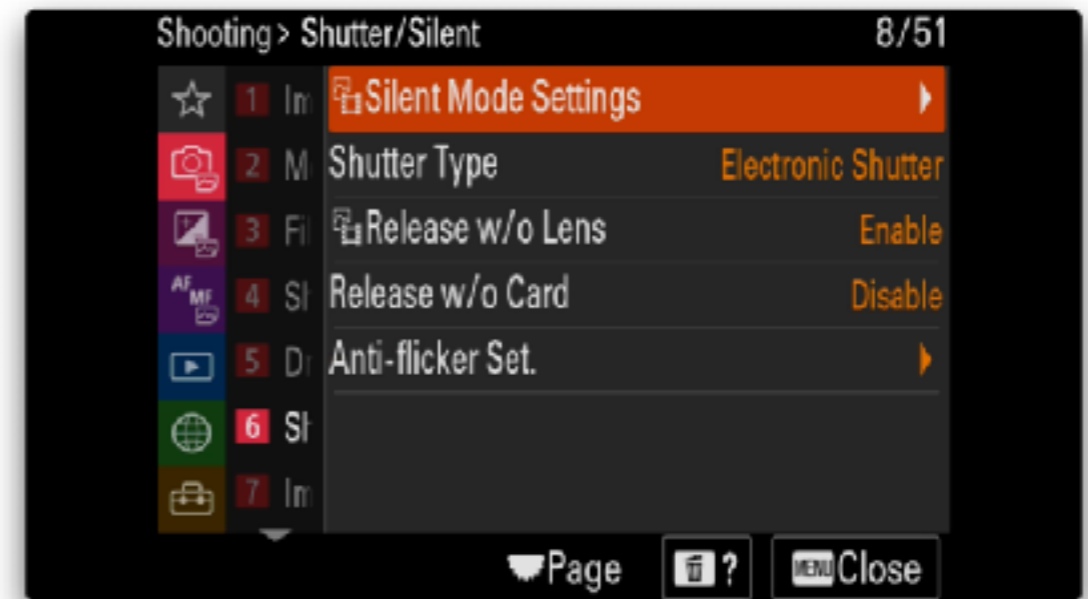
- Set the FPS for the dial settings - leave as default



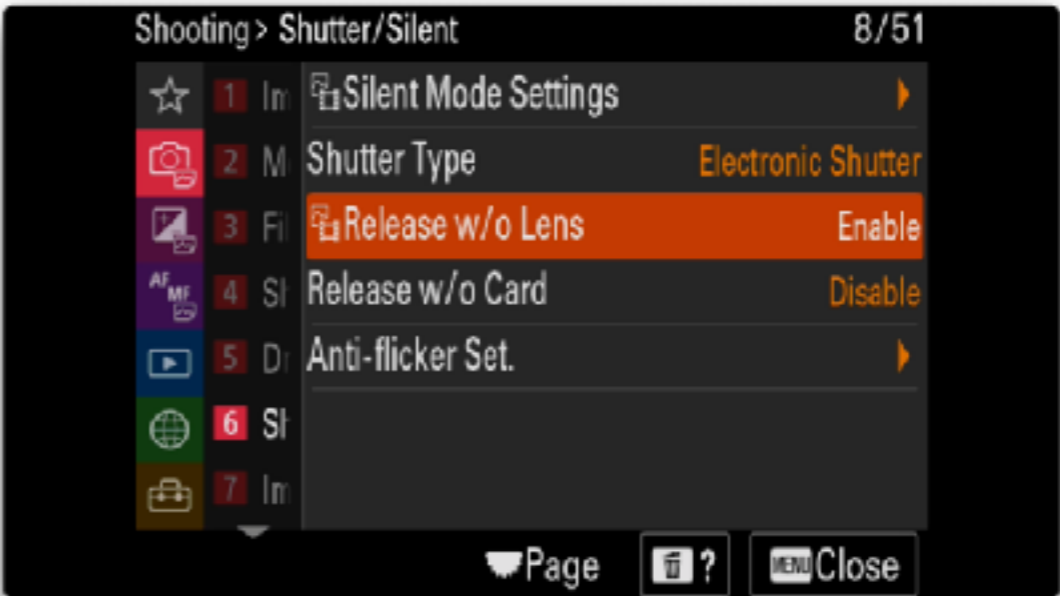
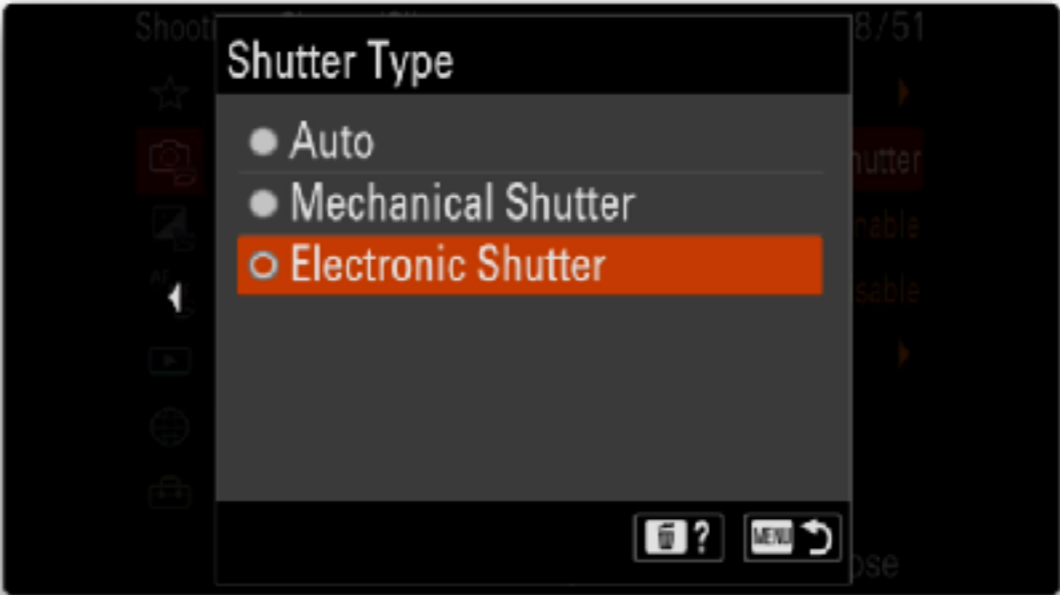
Shooting Menu - Image Quality

Shutter/Silent Settings

- Ignore silent mode settings
- Select Electronic Shutter
- Disable Release without lens/card - just in case you forget to put them in !



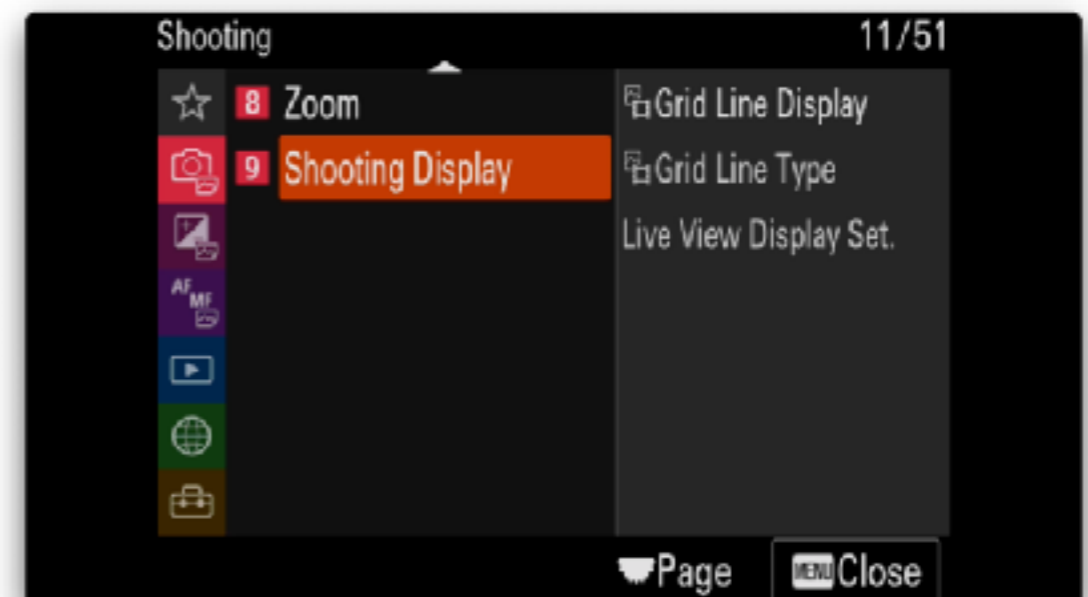
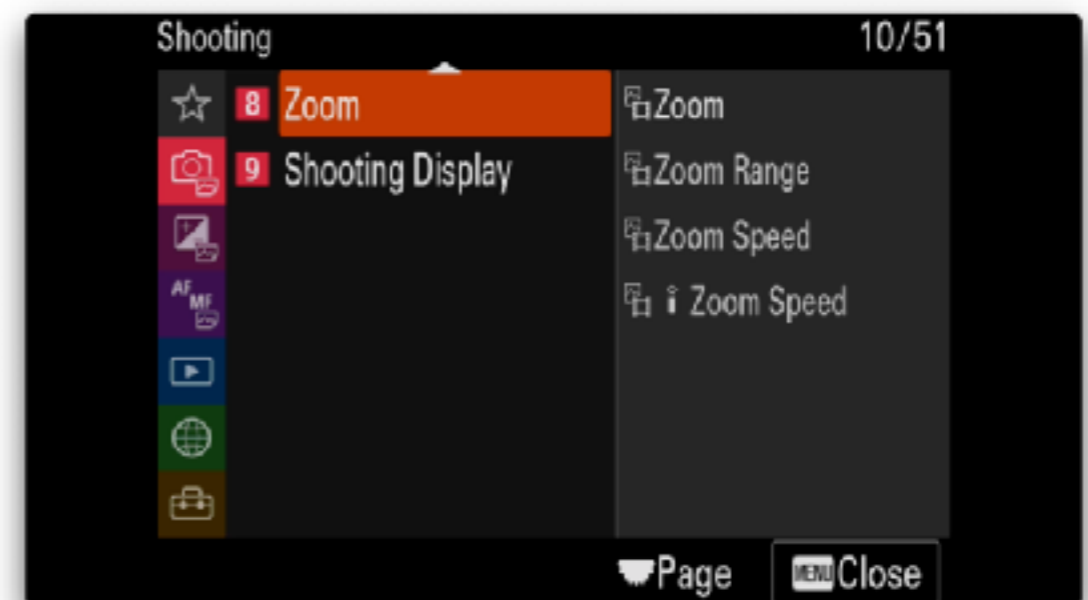
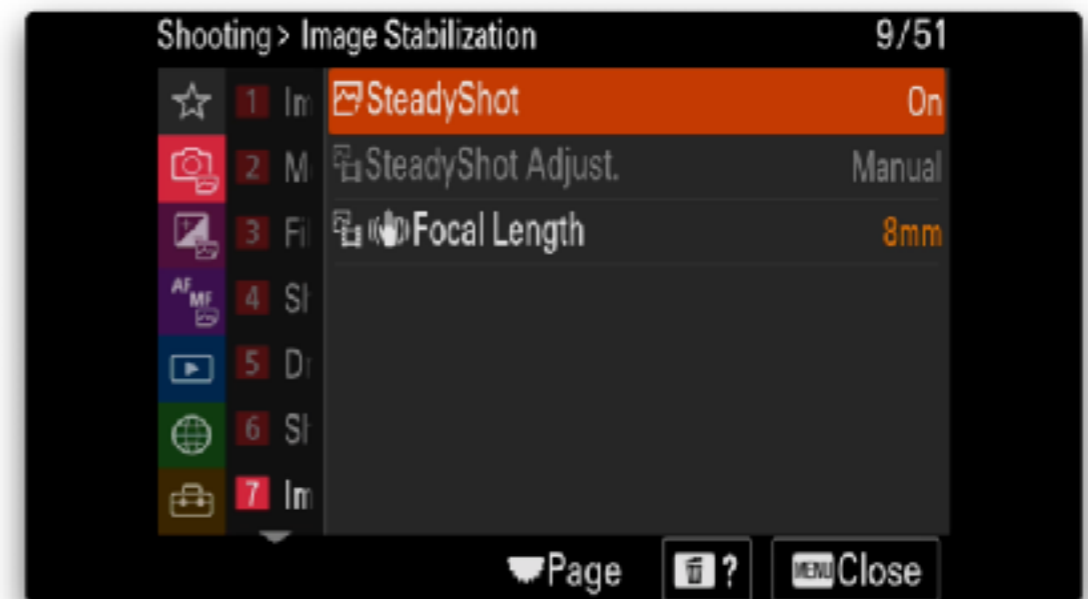
Shooting Menu - Image Quality



Shooting Menu - Image Quality

Image Stabilisation Settings

- SteadyShot on



Exposure/Color Menu

Exposure/ Color

Key Settings

ISO: Auto

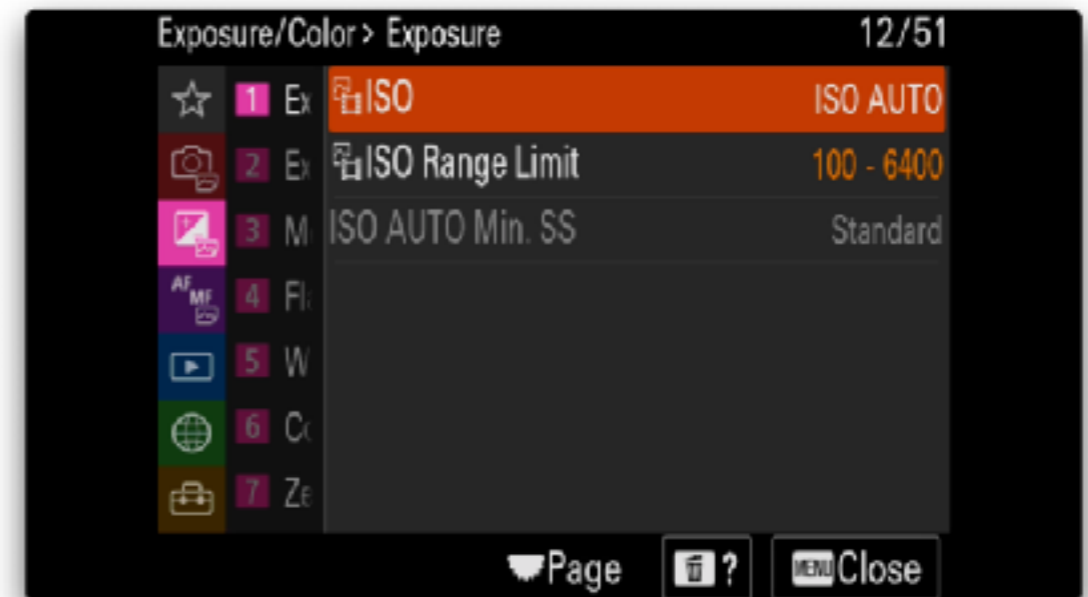
ISO Range Limit: 100-6400



Exposure/Color Menu - Exposure

Exposure Settings

- ISO Auto - control the shutter speed and aperture but let the camera adjust the ISO automatically depending on the available light



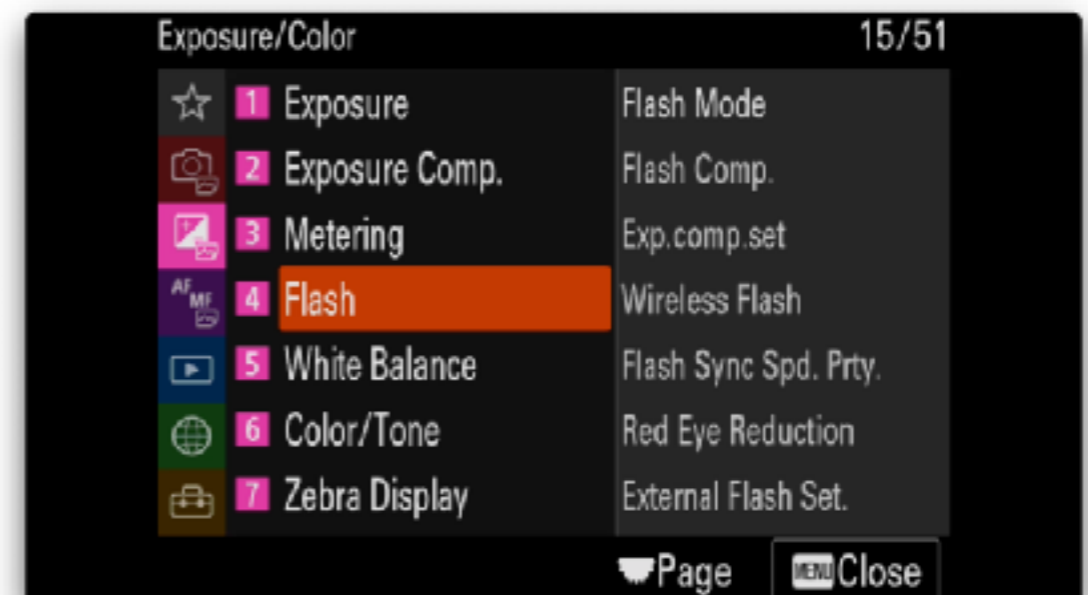
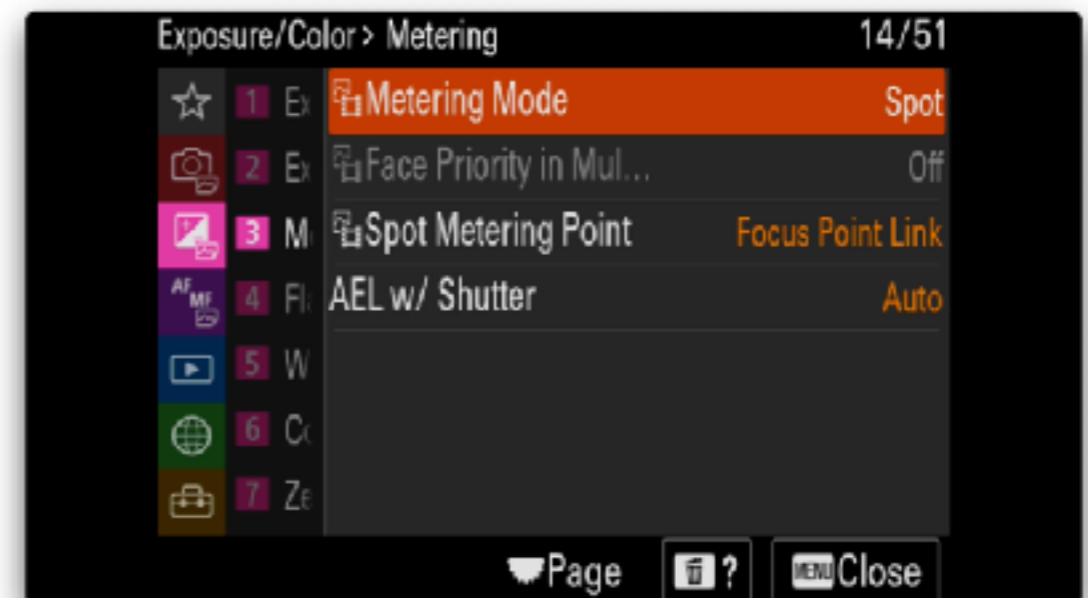
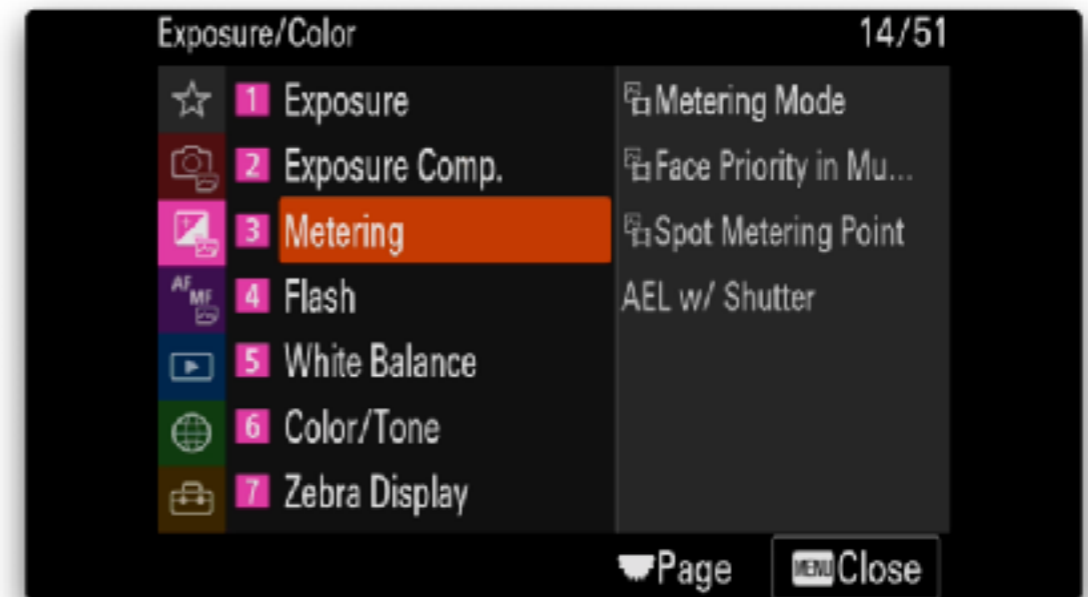
Exposure/Color Menu - Metering

Metering Mode

- Spot Metering - adjust the ISO using spot metering measurement. For birds and animals ideally we want the focus point to be correctly exposed and not have the exposure affected by the background that may be darker or lighter than the subject. See Spot Metering Point below.

Spot Metering Point

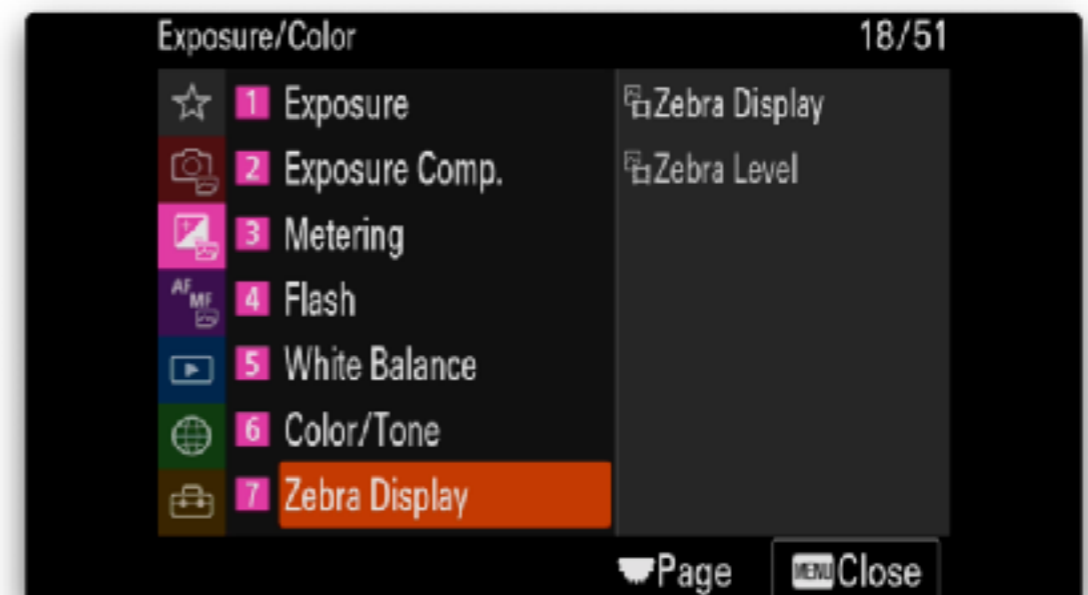
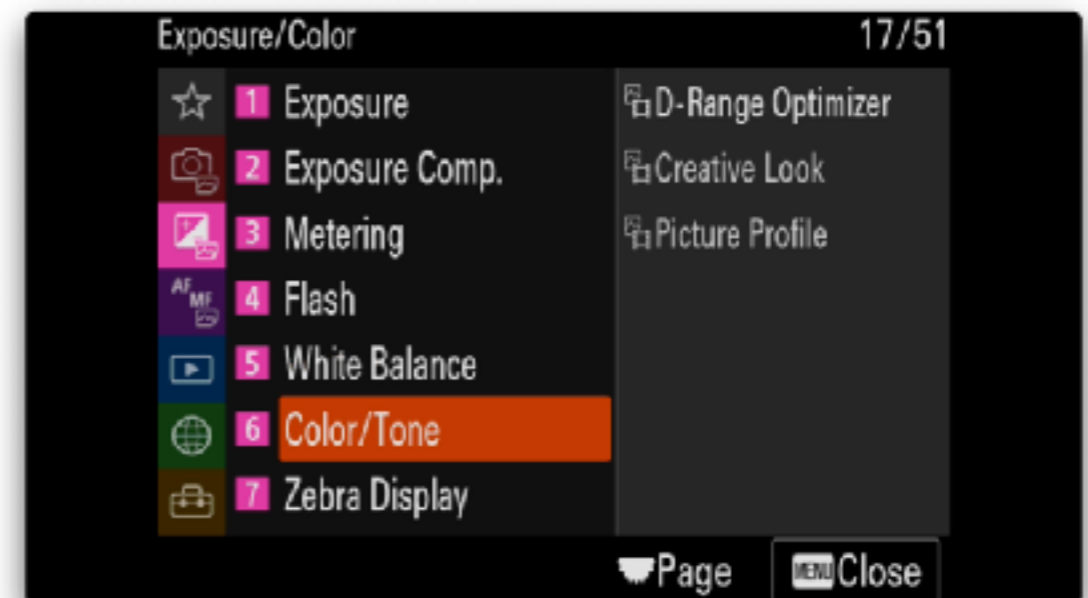
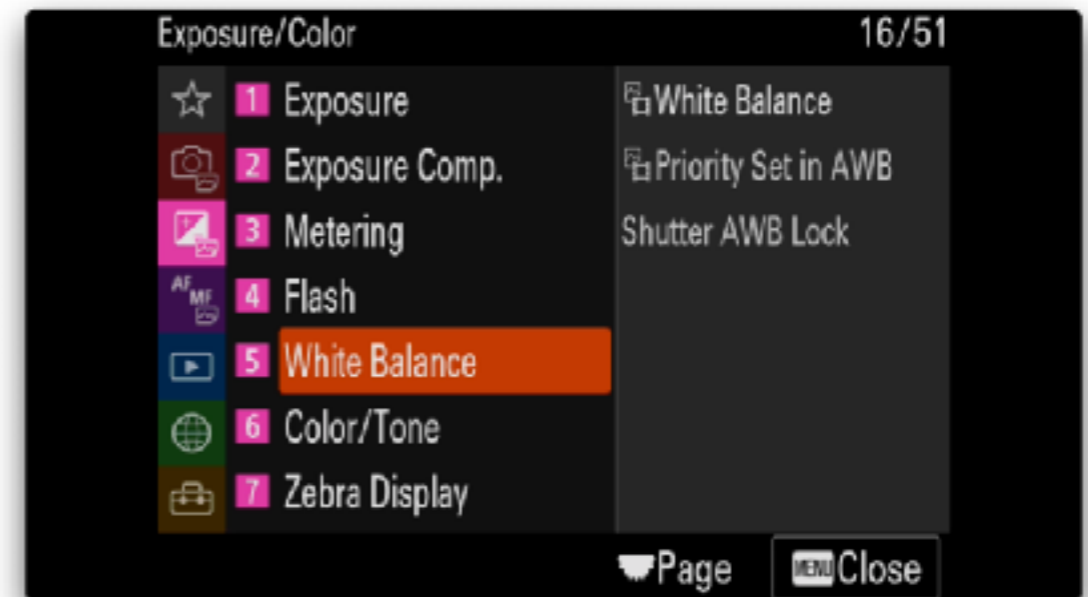
- Focus Point Link - use the focus point as the point for spot metering. Here we link the spot metering point to the focus point. See Metering Mode above.



Exposure/Color Menu - Other

Color/Tone

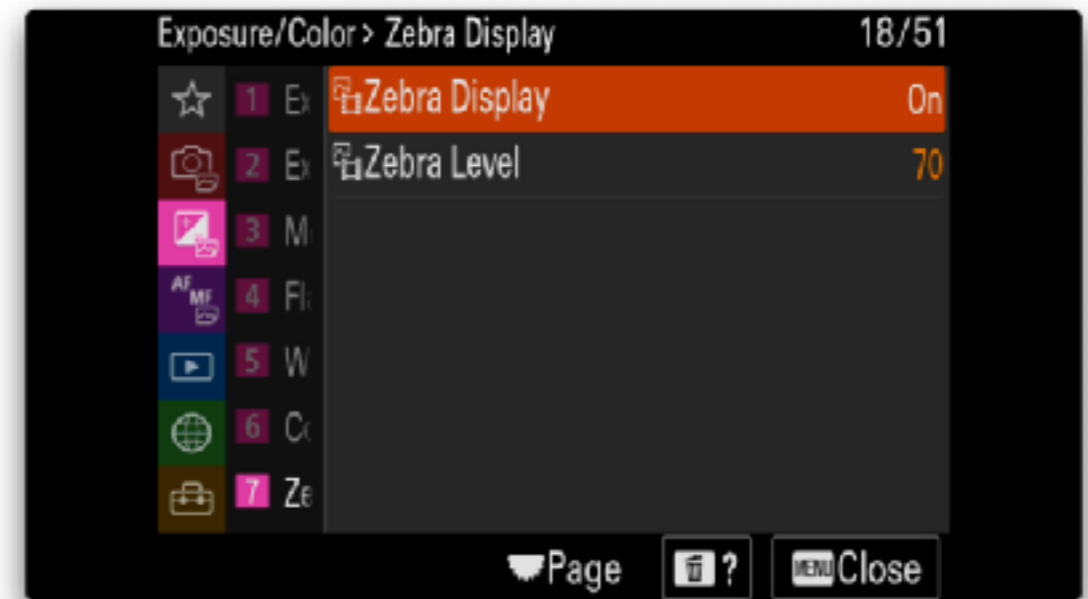
- VIVID - Adjust the in camera RAW publishing color settings.
- Sharpening +2



Shooting Menu - Zebra Display

Zebra Display

- Turn this on to get zebra striped in the view finder for over exposed areas of the image



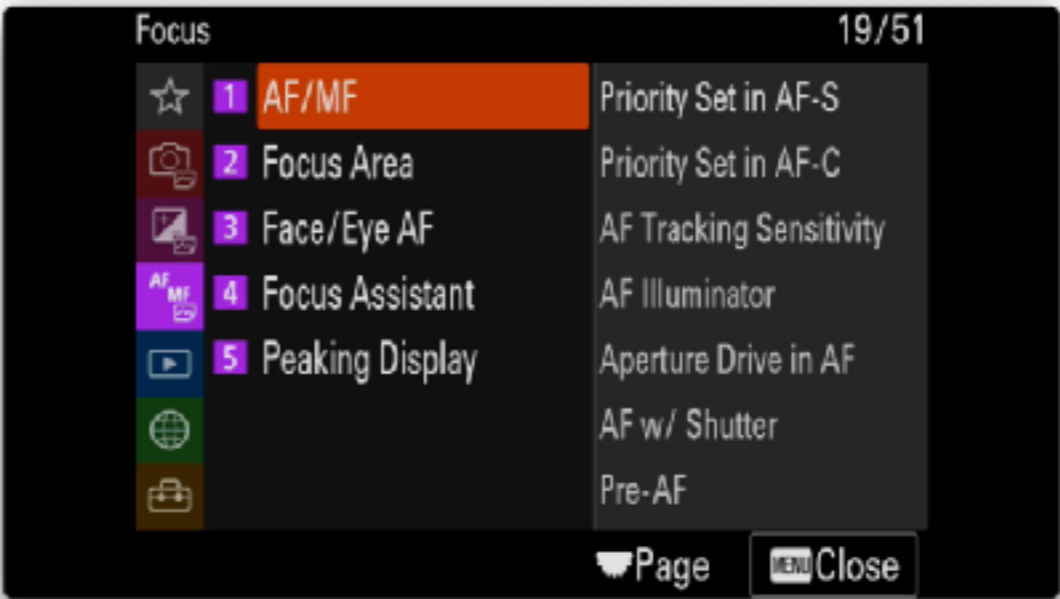
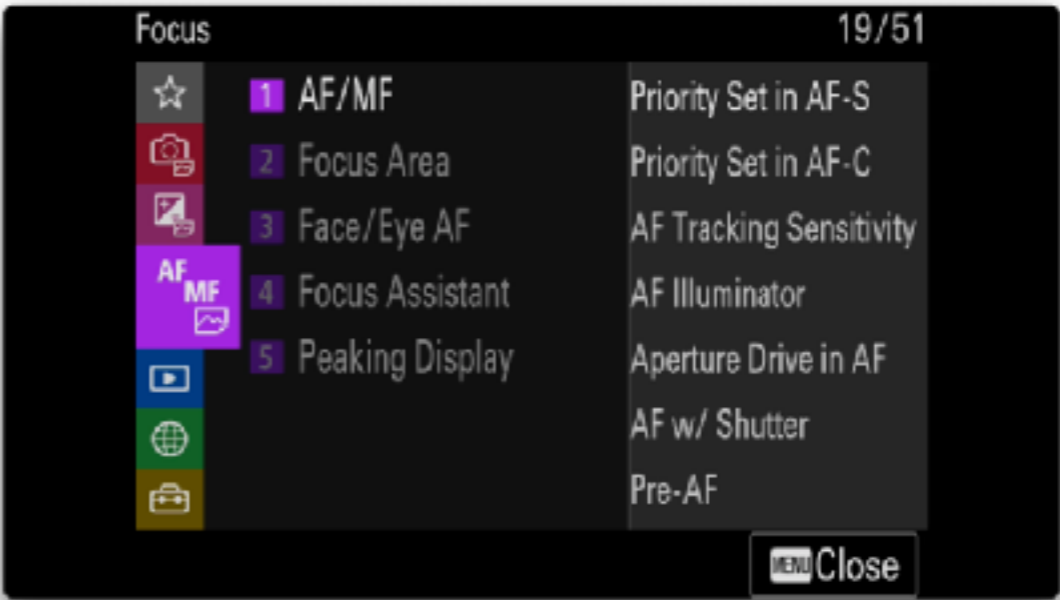
Focus Menu

Focus

Key Settings

Priority Set in AF-C: AF

Focus Area Limit: Wide, Zone, Spot (small), Tracking
Expandable Point



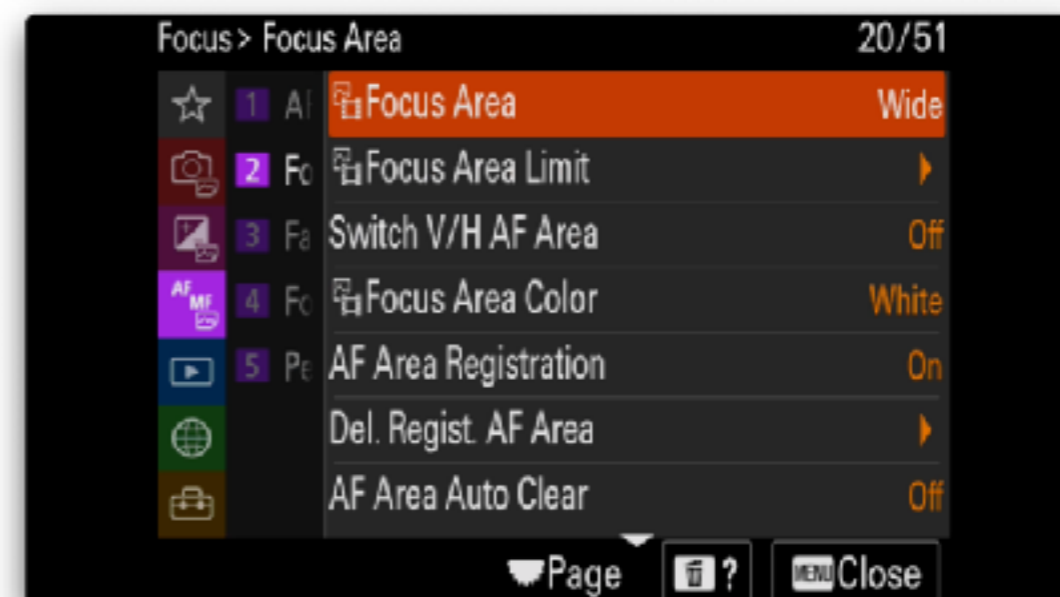
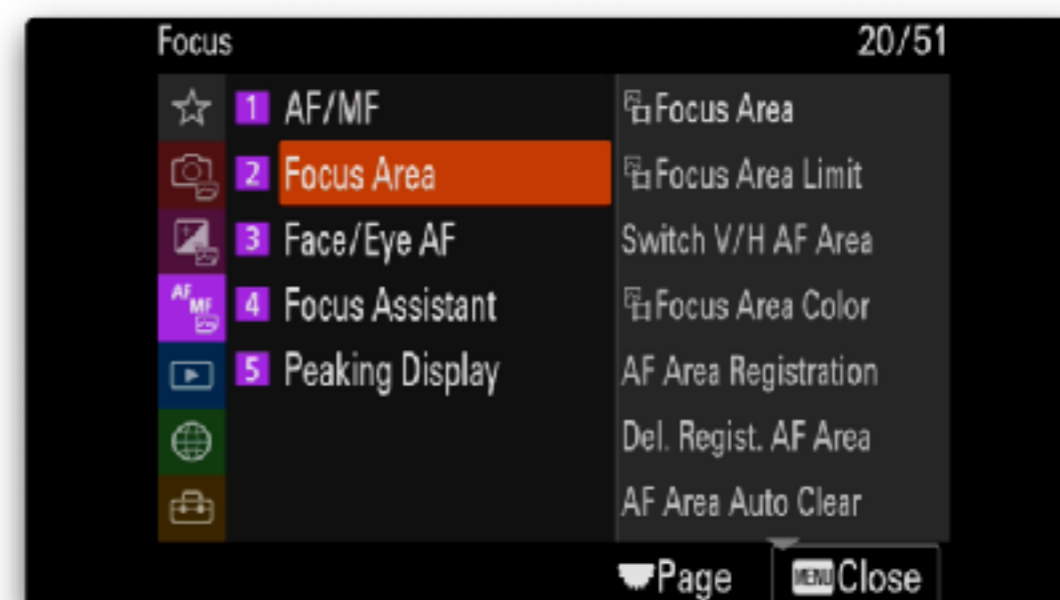
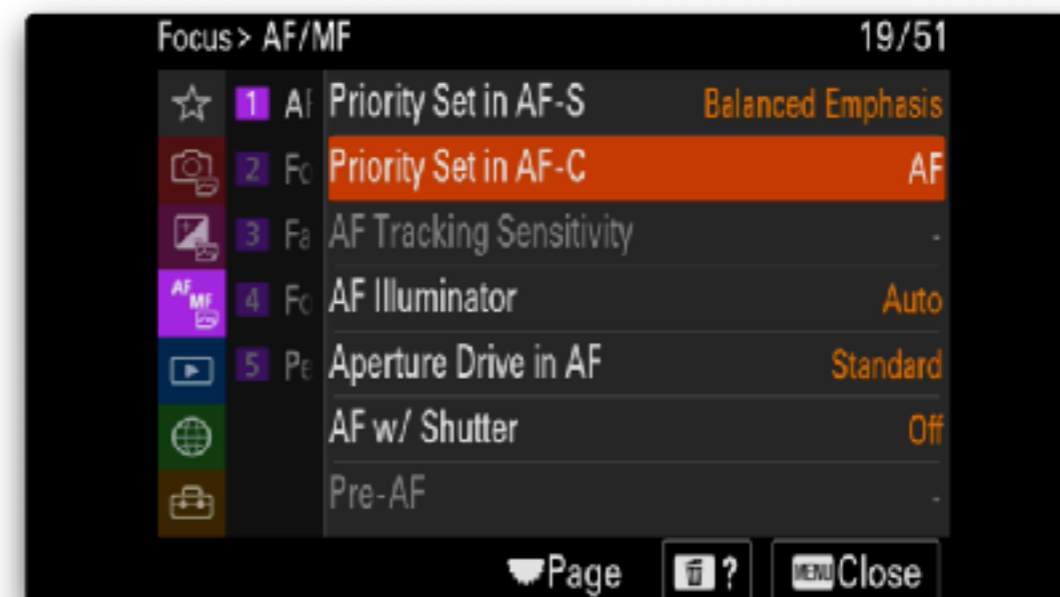
Focus Menu - Auto/Manual Focus

Priority Set in AF-C

- AF - camera will only fire the shutter if it is in focus. Use this to avoid large numbers of out of focus images if shooting at high FPS e.g. Birds in flight. Some prefer to set this to Release so the camera will fire the shutter regardless of whether it is in focus or now claiming that they get more usable shots.

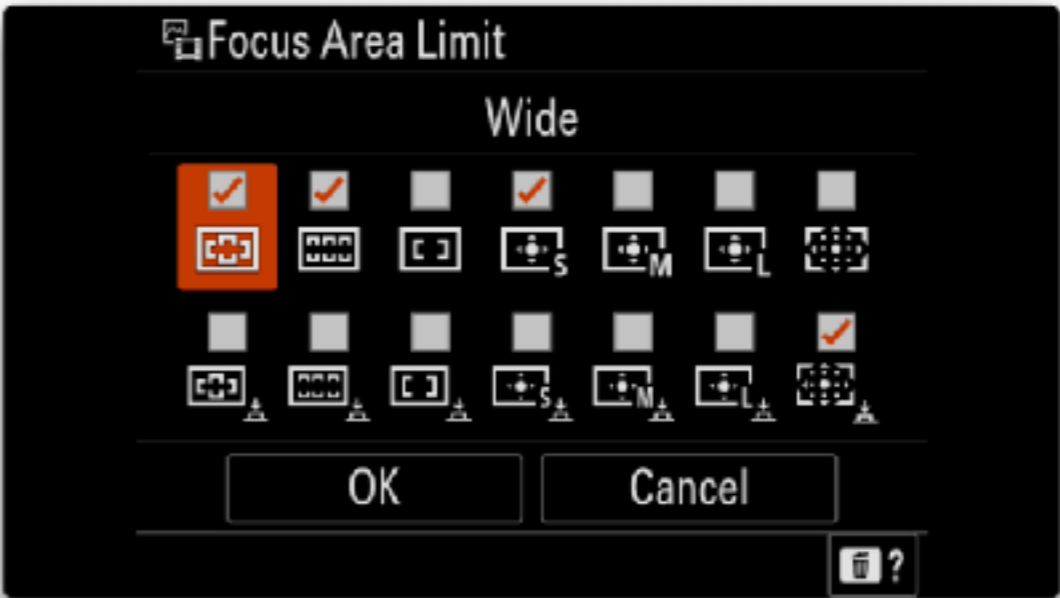
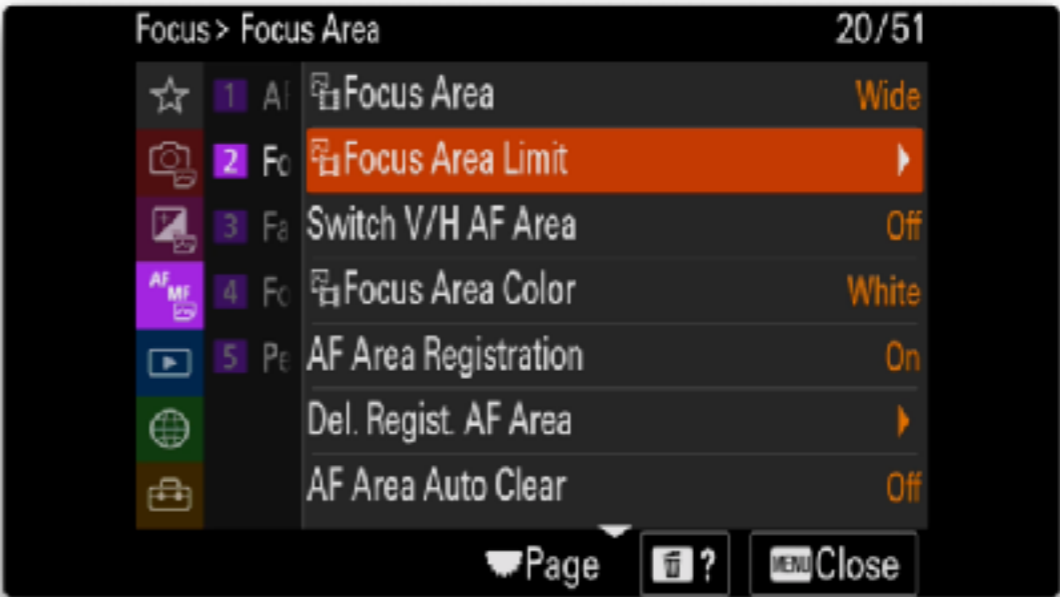
Focus Area Limit

- Wide, Zone, Spot(small), Tracking Expand Spot - select the Focus Area modes that will be available to select from via the fn button or other programmed custom button



Focus Menu - Focus Area Mode

Screens on right show how only the selected options appear when using the Fn button.



Focus Menu - Focus Area Limit

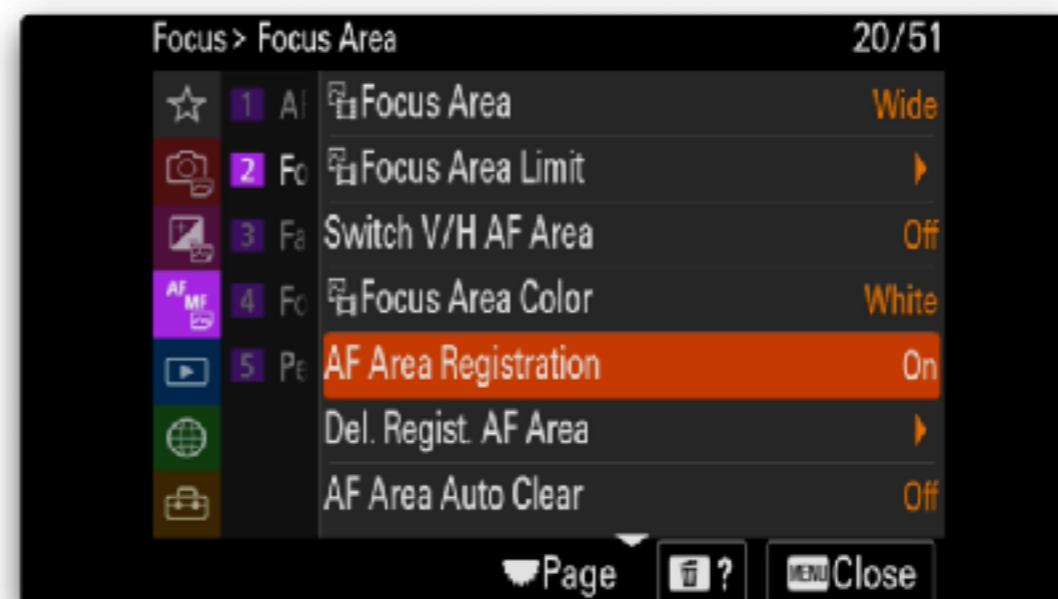
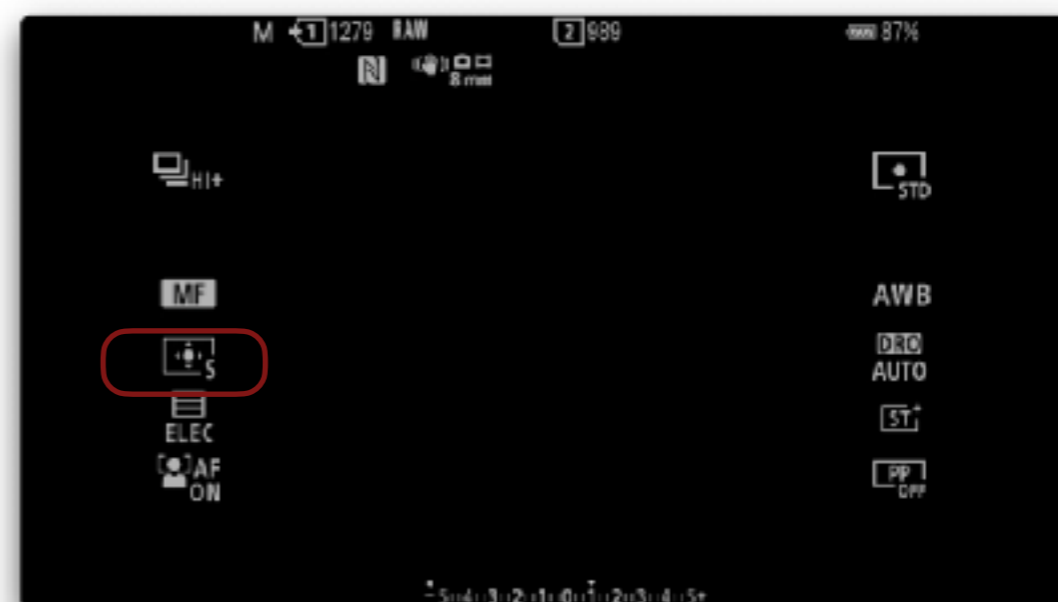
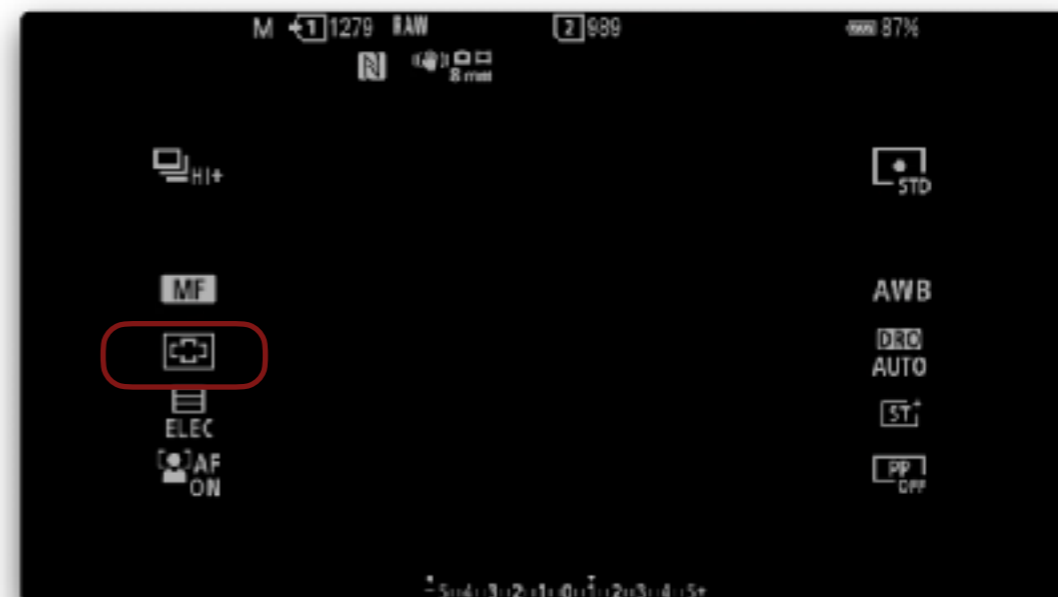
Screens on the right show how the two different back autofocus buttons select the programmed Focus Area Modes.

AF Area Registration

To set the Registered Focus Area mode follow these steps:

- Get out of Menu mode
- Use the Fn button to select the Spot(small) or Tracking Expand Spot mode.
- Now press and hold the Fn button until a message pops up indicating that the mode has been registered.
- Now use the Fn button to select Wide mode again.

In the next steps we will program the AEL button as a second back focus button using the Registered Focus Area mode. So by simply pressing either AF-ON or AEL button you get the different focus mode instantly.



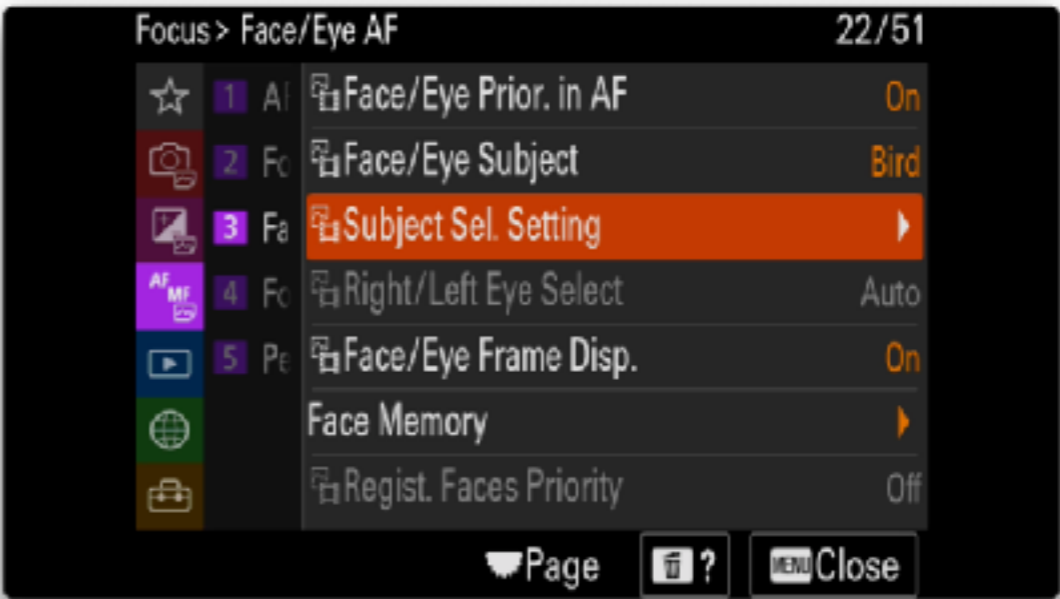
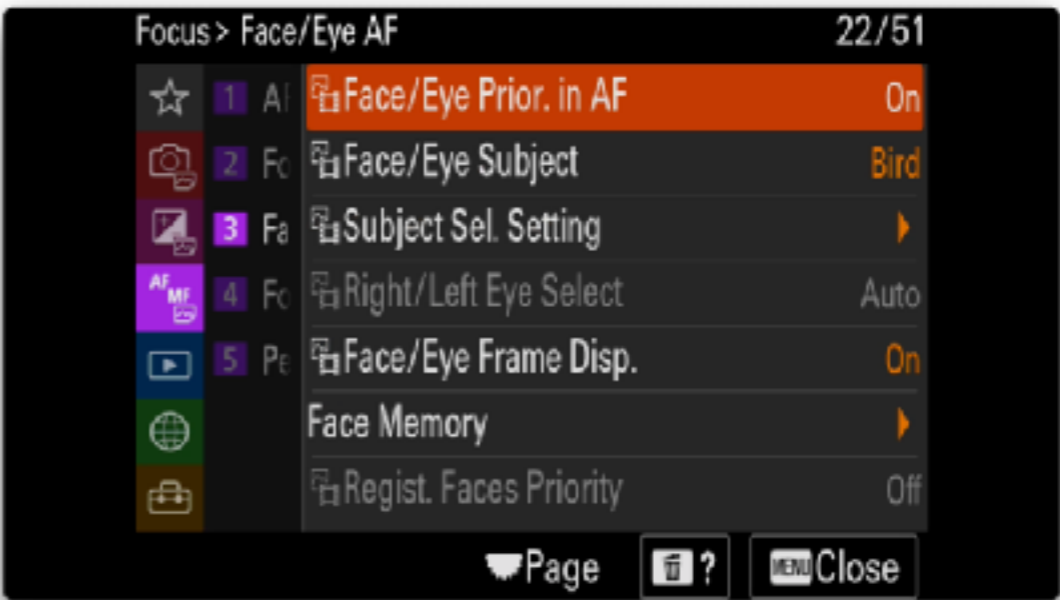
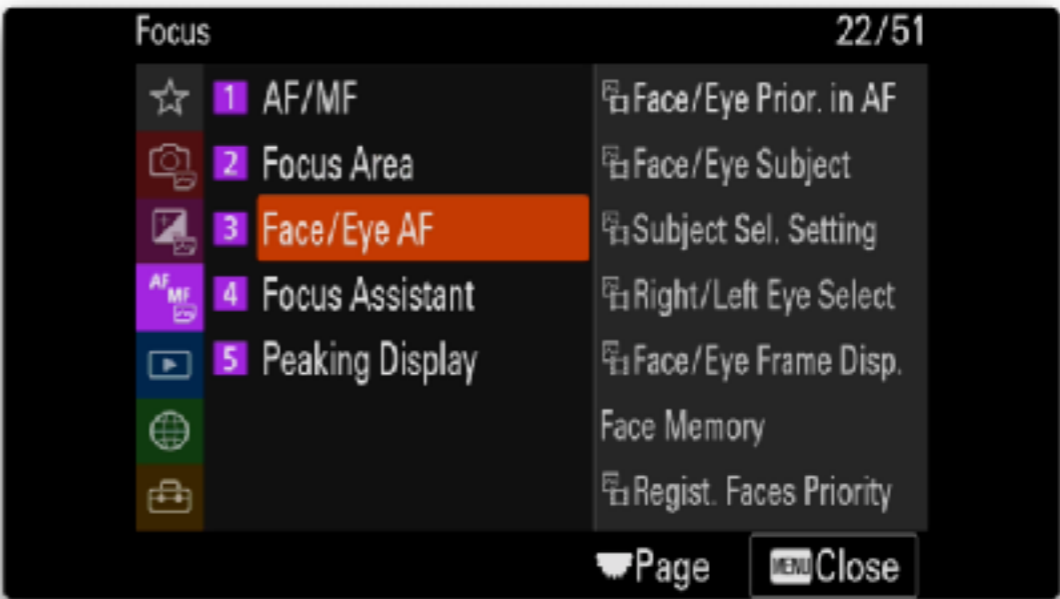
Focus Menu - Face/Eye AF

Face/Eye AF Settings

Set as per shown on the right

Subject Selection Settings

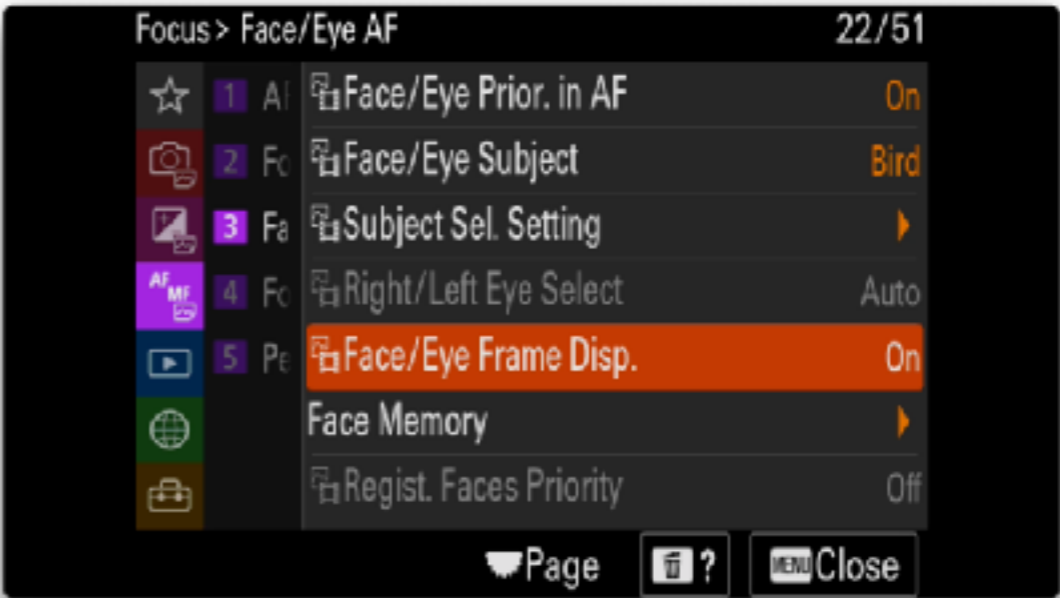
Select the options you want to be able to toggle through with the custom button assignment. Select them all.



Focus Menu - Face/Eye AF

Face/Eye Frame Display

Enable this in order for the subject detection frame to show in the view finder



Focus Menu - Focus Assistance

Auto Magnifier in MF

On



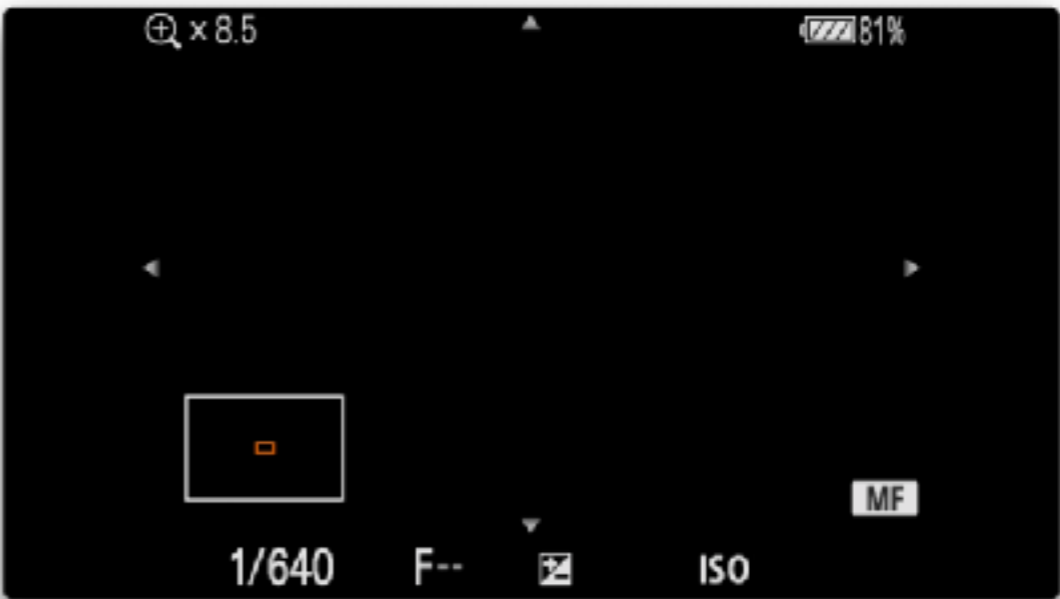
Focus Menu - Focus Assistance

Focus Magnification Time

No Limit

Initial Focus Magnification

4.7x - this will zoom in 4.7x when using the AF/MF Hold button on the lens in conjunction with a slight turn to the focus ring



Focus Menu - Focus Assistance

AF in Focus Magnification

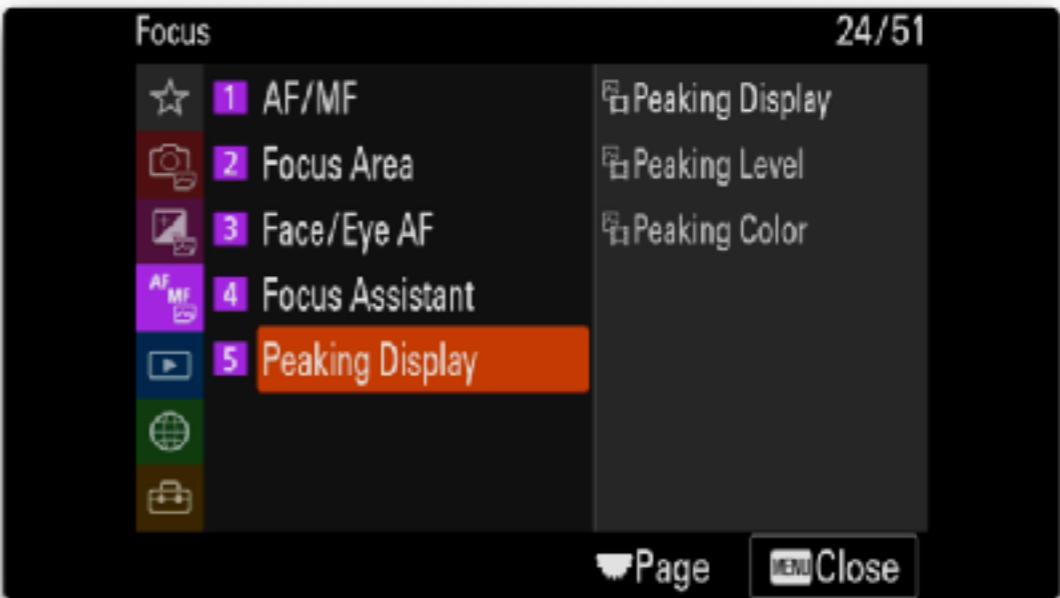
On



Peaking Display

On.

Set this up and use in conjunction with the Lens AF/MF Hold button and the focus control ring to zoom in like a spotting scope.



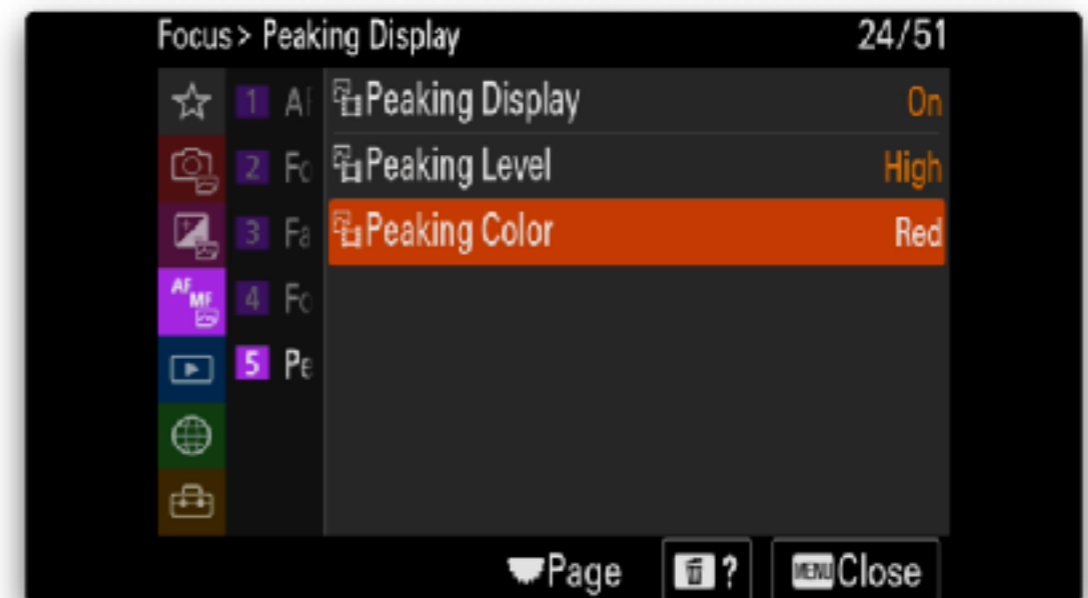
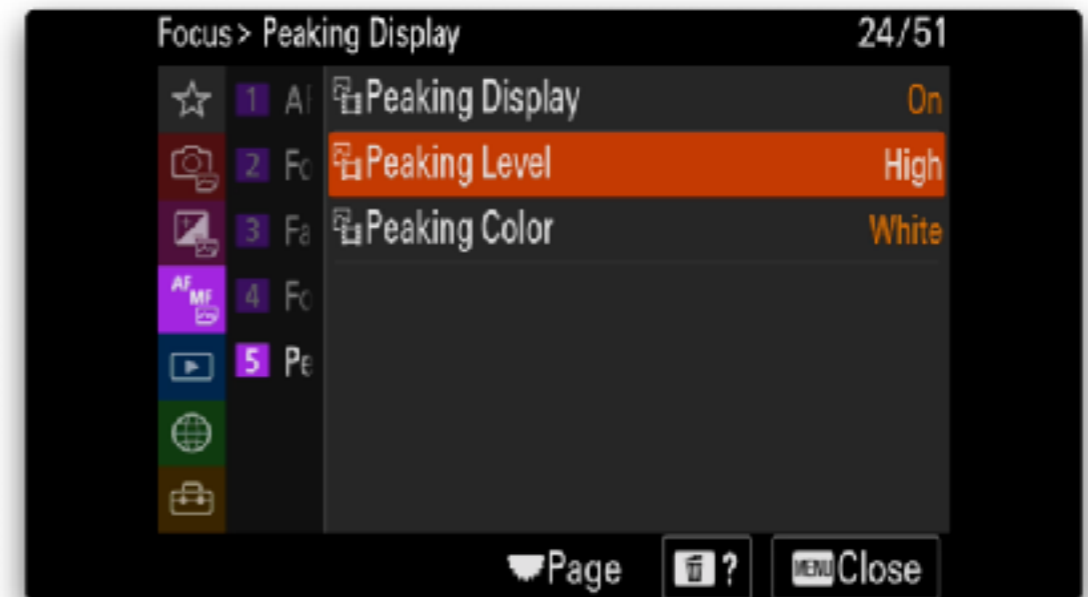
Focus Menu - Focus Assistance

Peaking Level

High.

Peaking Color

Set this to red or the colour you expect to be visible against the background.



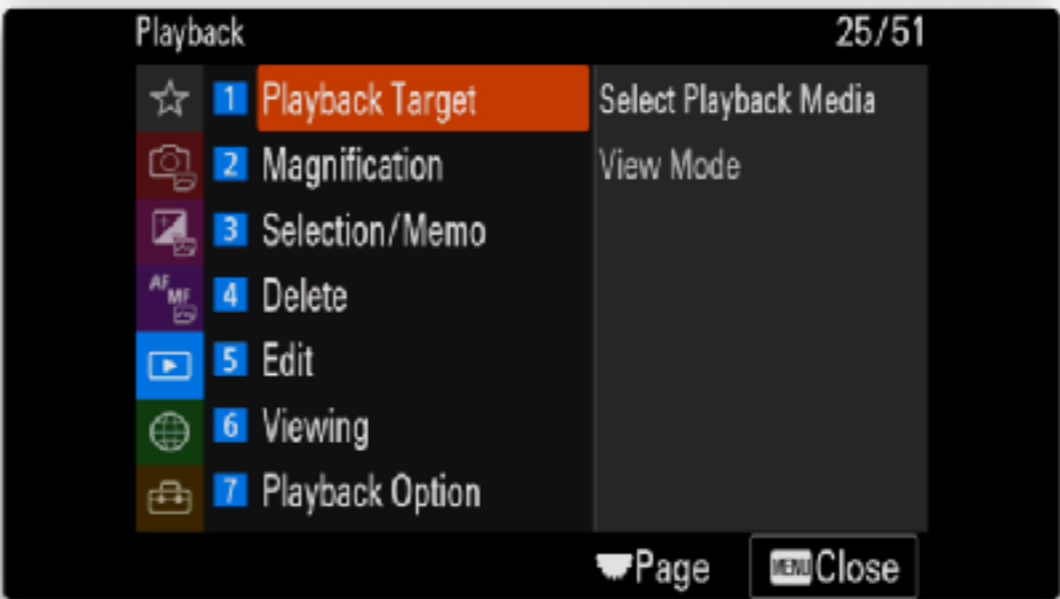
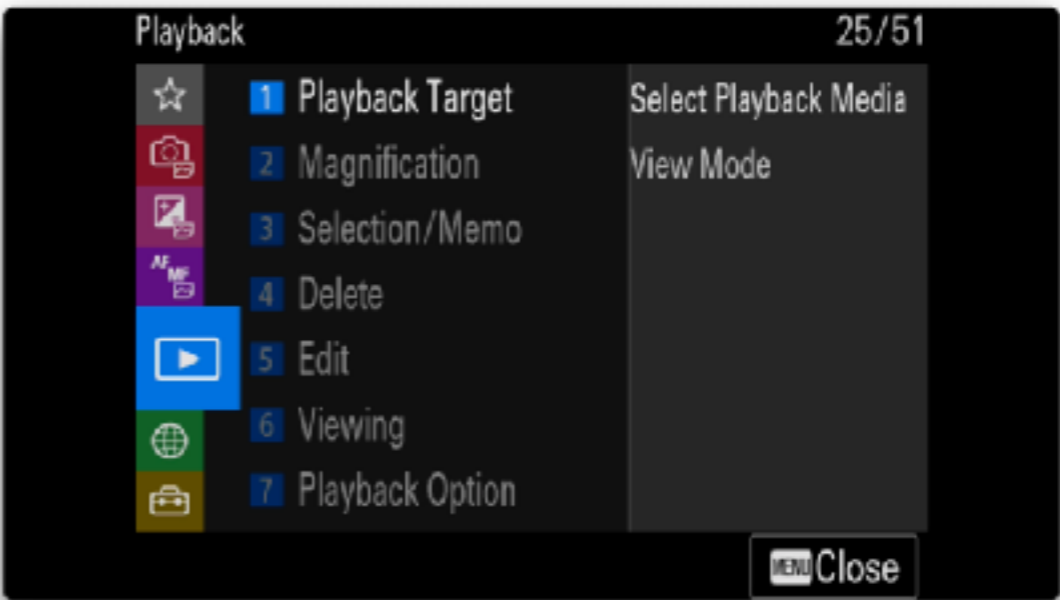
Playback Menu

Playback

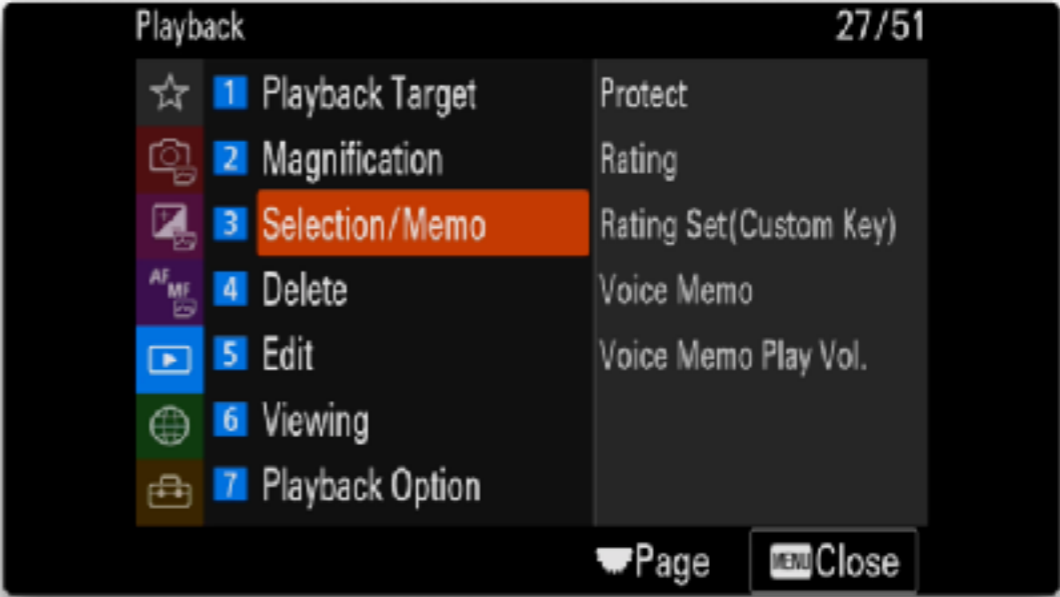
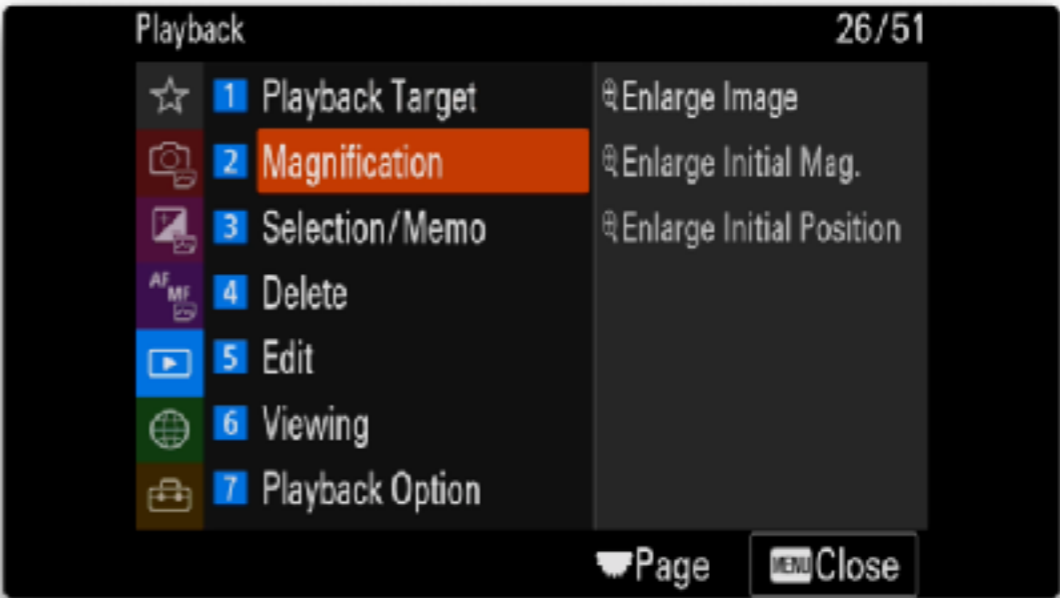


Key Settings

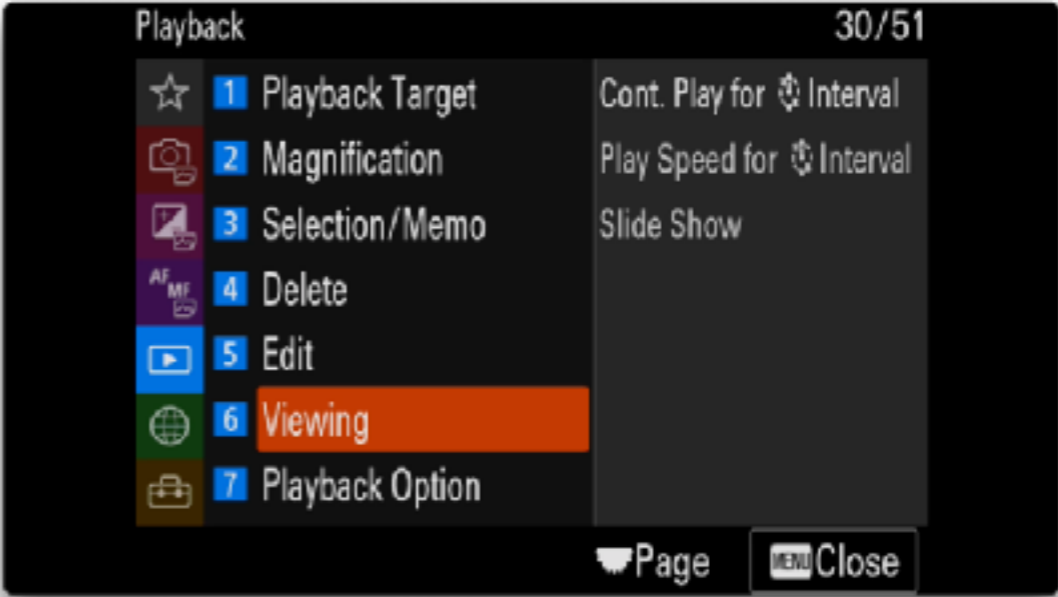
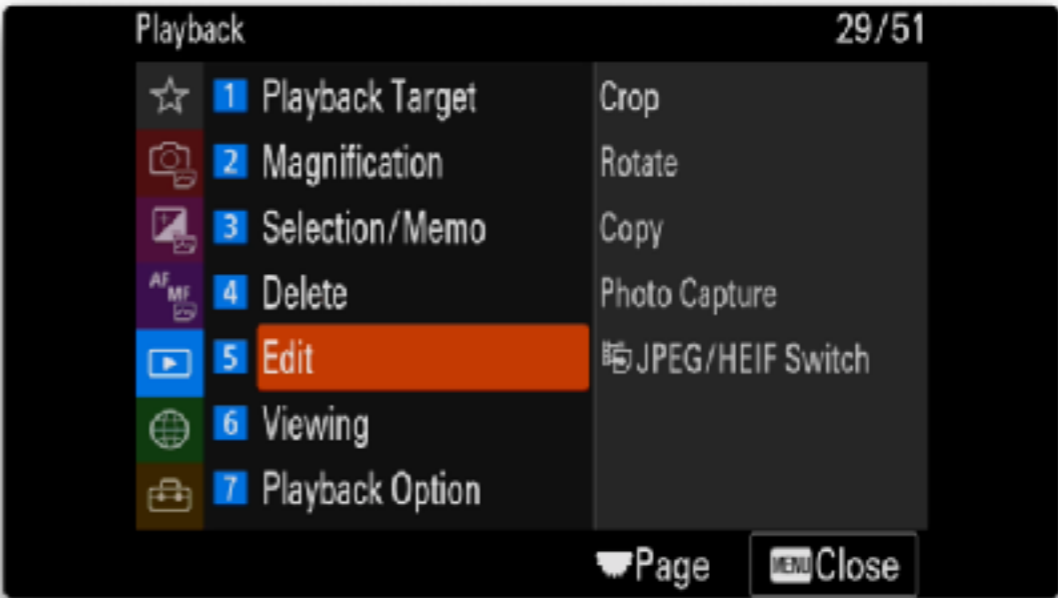
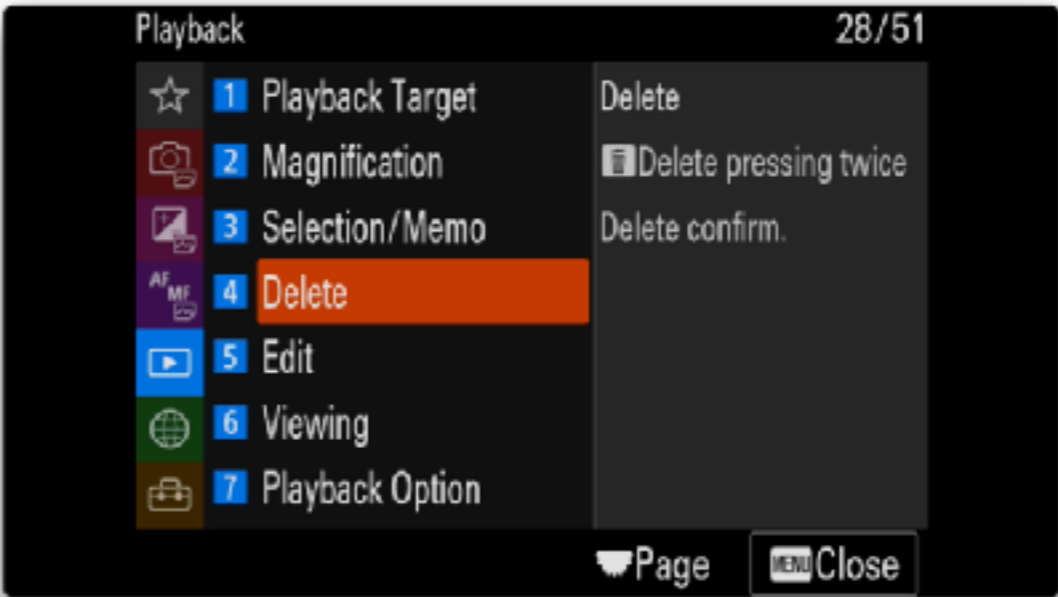
Playback Option: Display as Group



Playback Menu



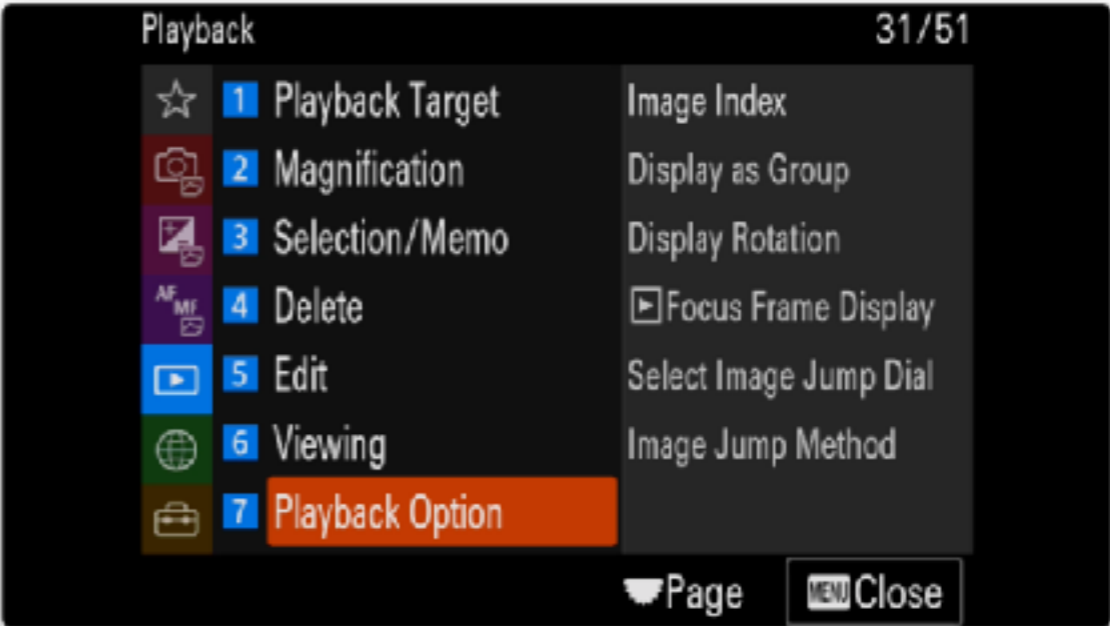
Playback Menu - Image Quality



Playback Menu - Image Quality

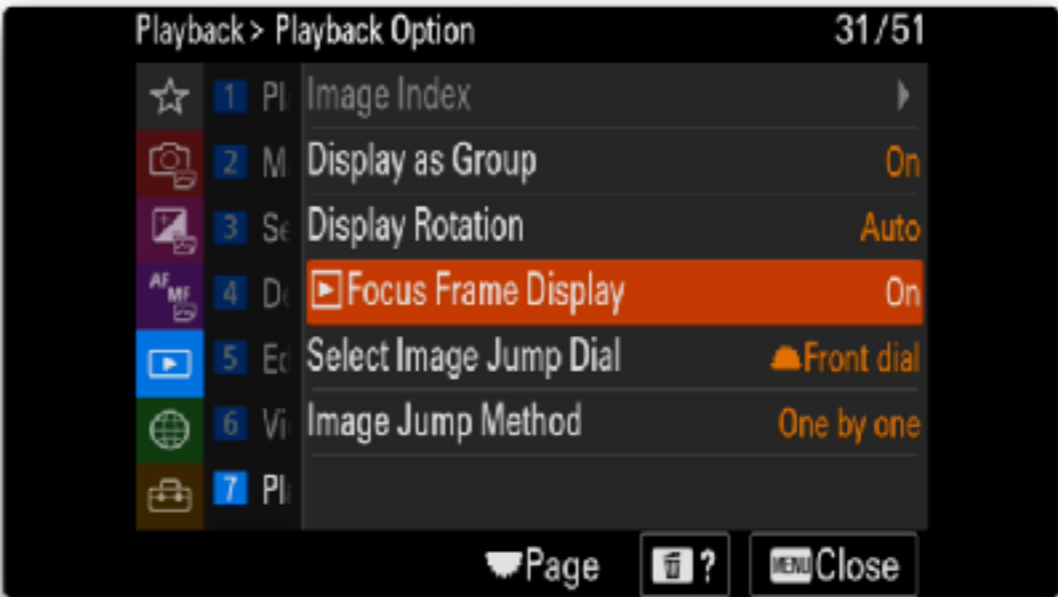
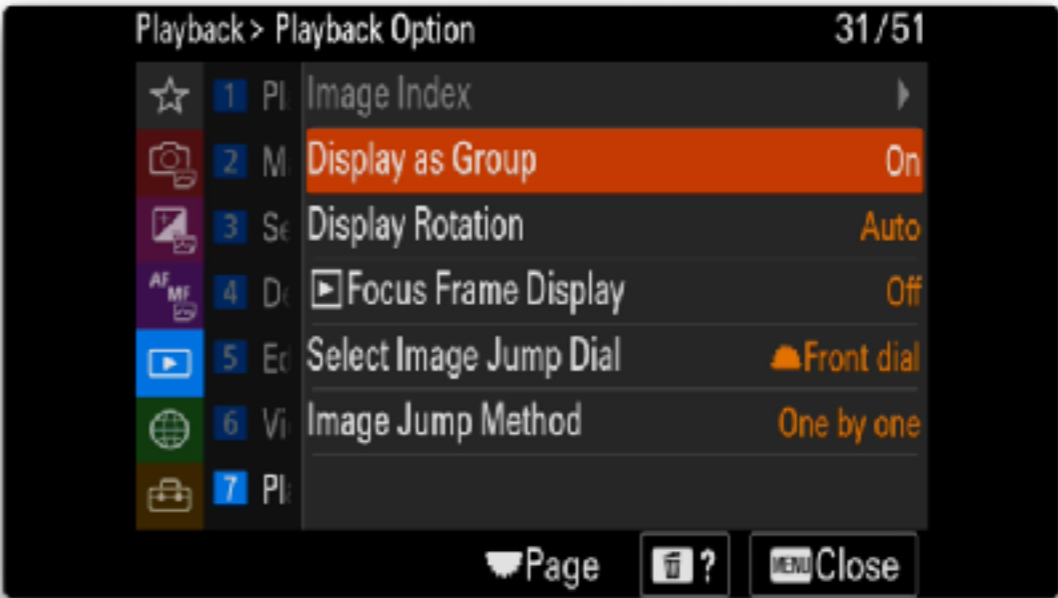
Display as Group

Turn this on so that all shots in a sequence as shown as a Group. With high shutter speeds this helps make browsing the images on the camera much easier.



Focus Frame Display

Turn this on so that the focus frame gets shown during playback to allow you to confirm the point of focus.



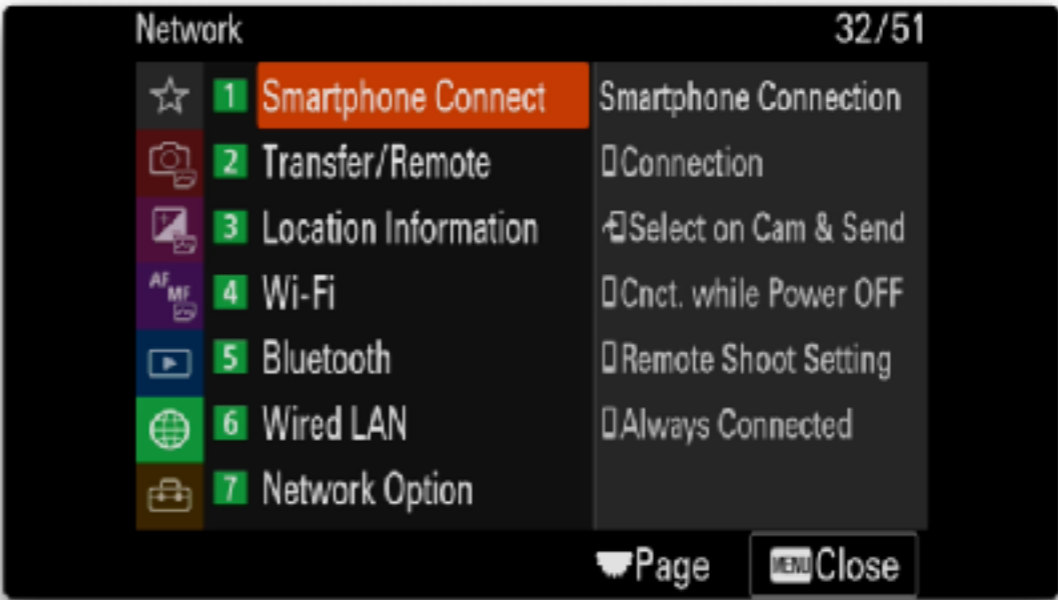
Network

Key Settings

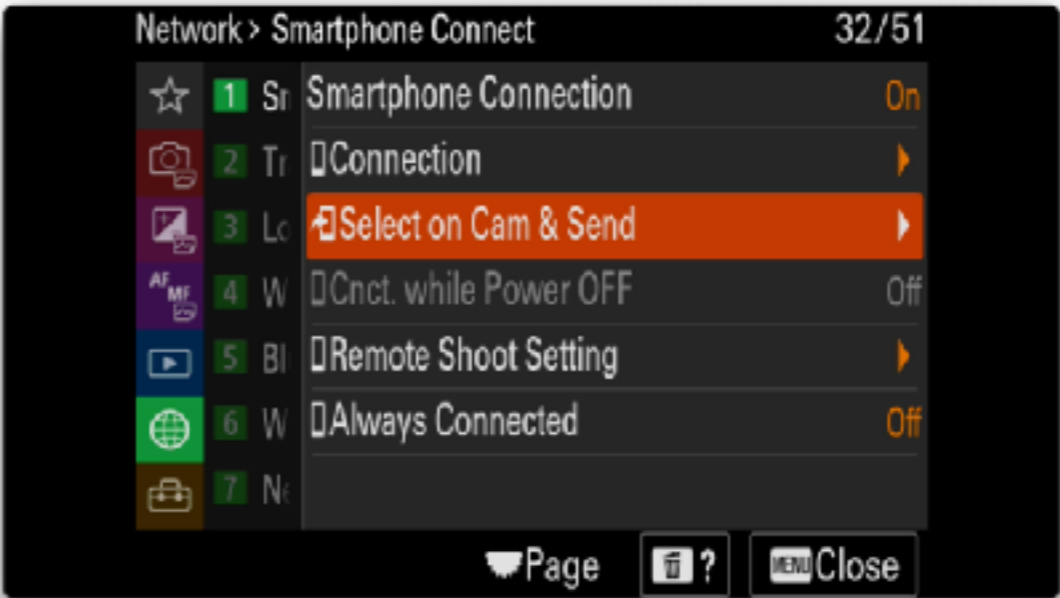
Smartphone Connect

Connection

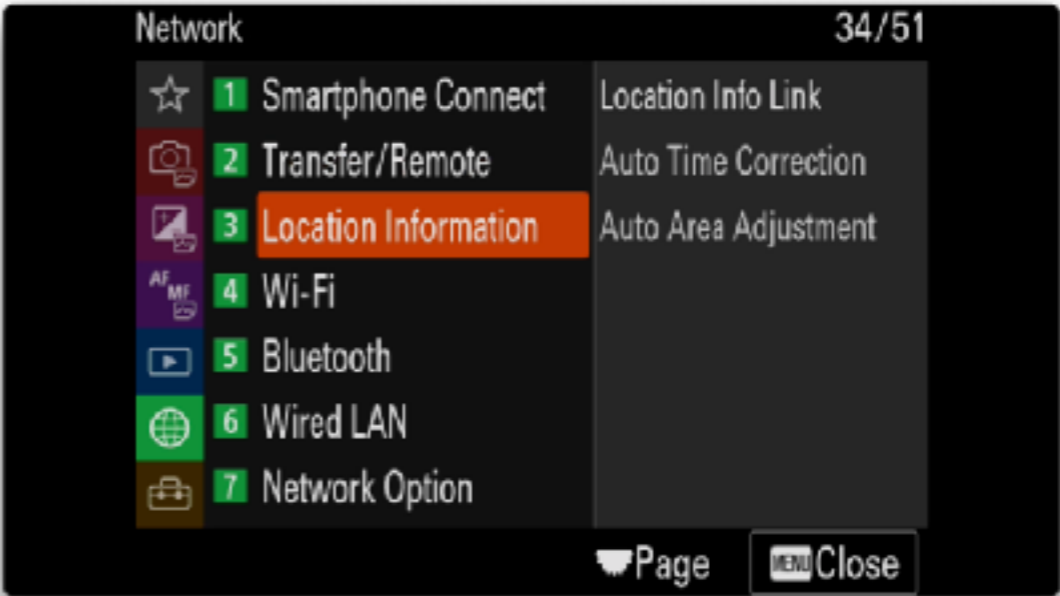
Select on Camera & Send



Network Menu - Smartphone Connect



Network Menu - Other

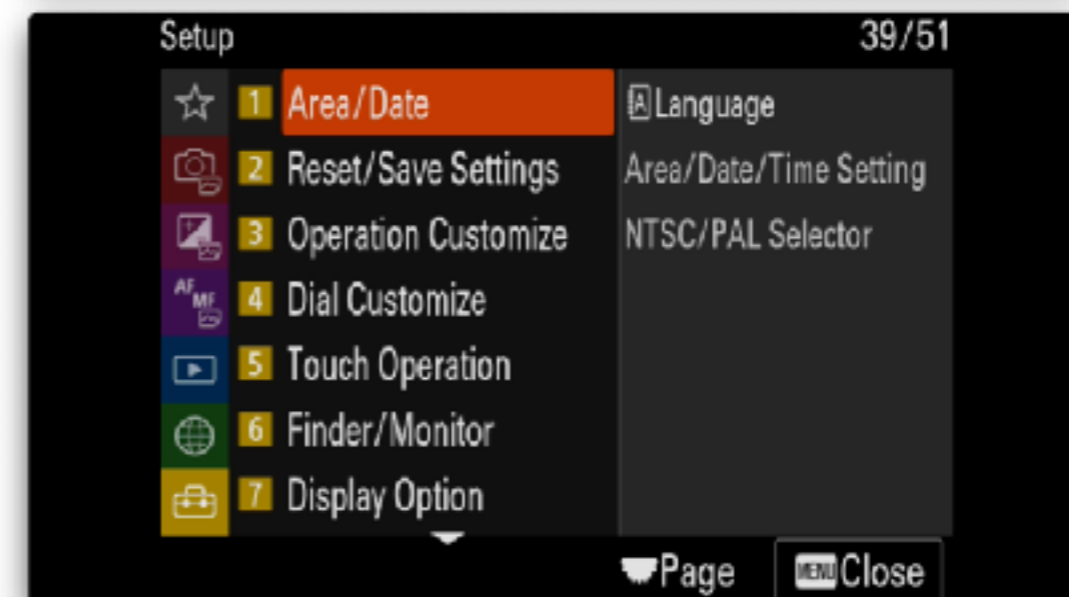
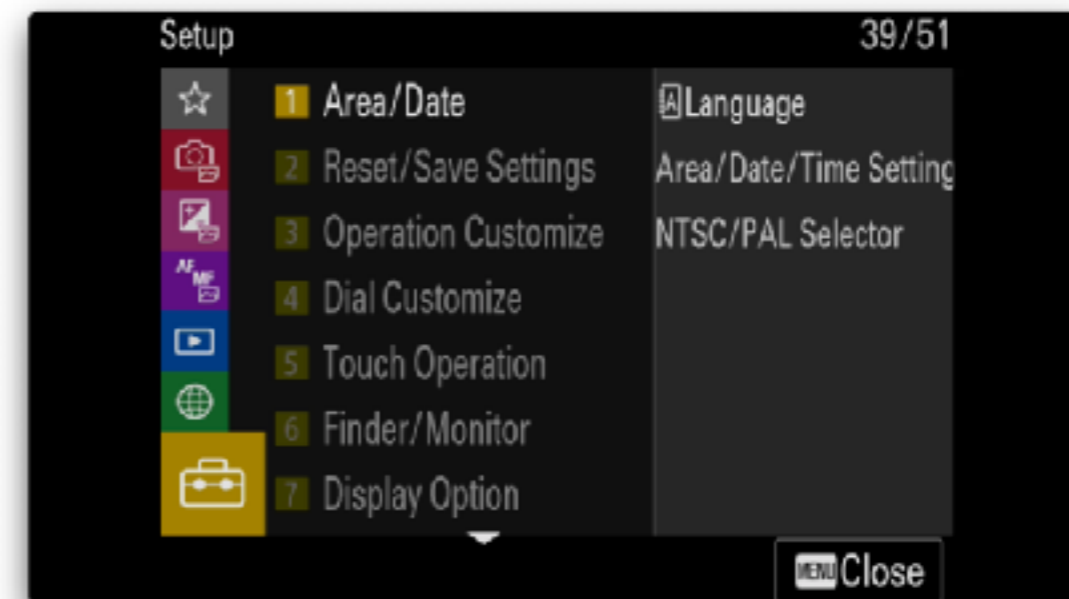


Setup Menu

Setup

Key Settings

Custom Key Assignments - program the cameras buttons and dials for specific functions.

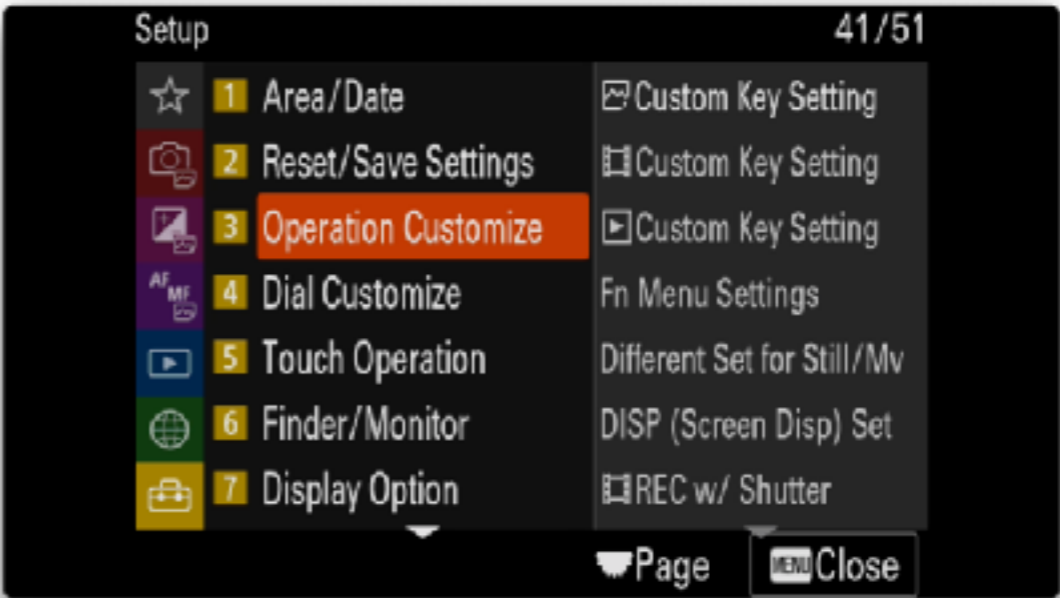
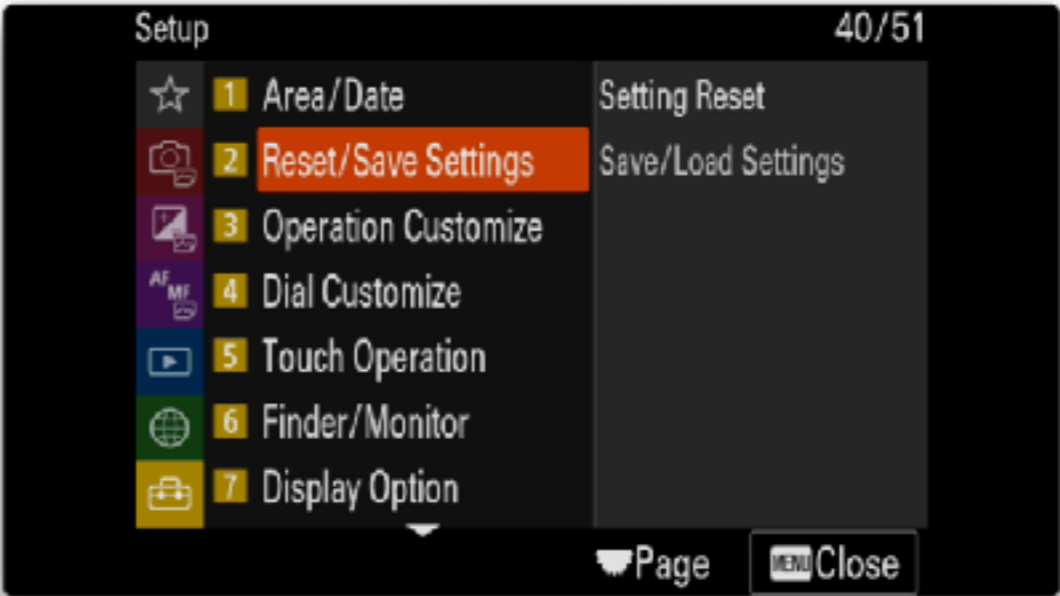


Setup Menu - Image Quality

Custom Key Settings

Assign functions to the cameras buttons as shown on the screens on the right.

Three buttons and dials allow you to quickly switch models without needing to lift your eyes from the view finder.



Setup Menu - Operation Customise

Rear1

1 - ISO dial

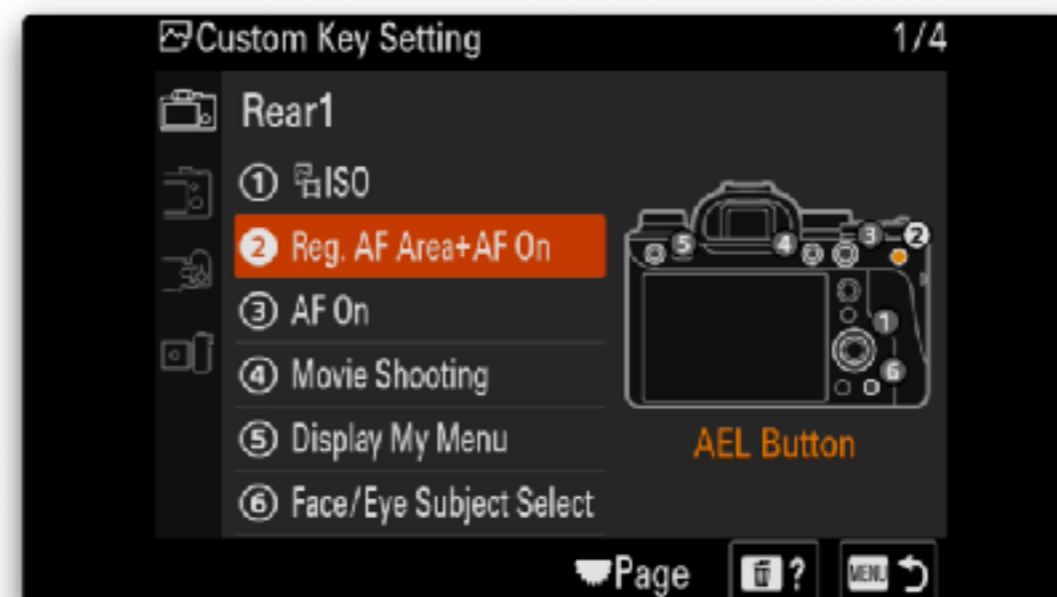
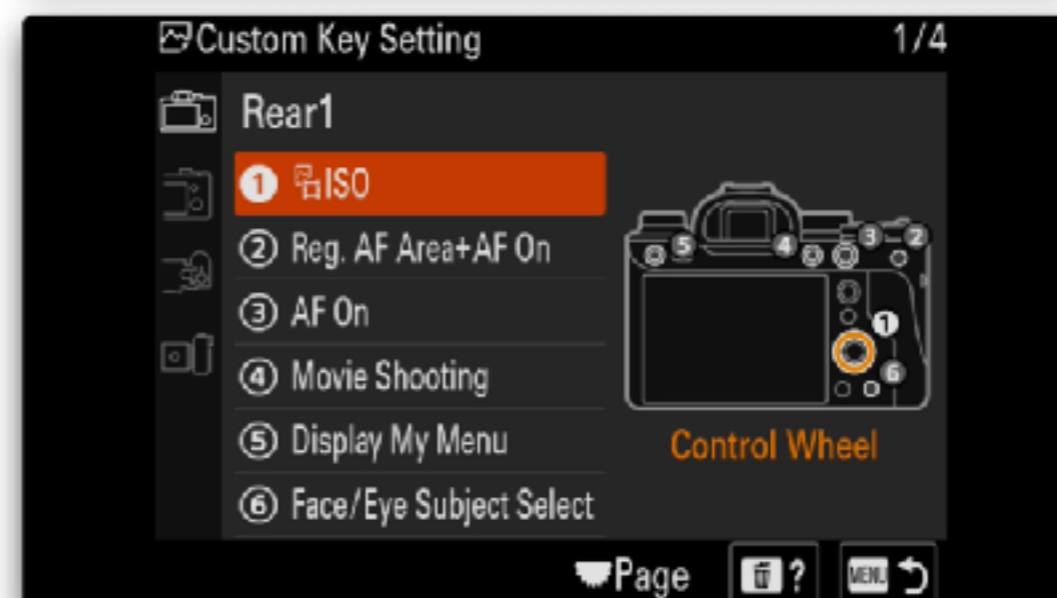
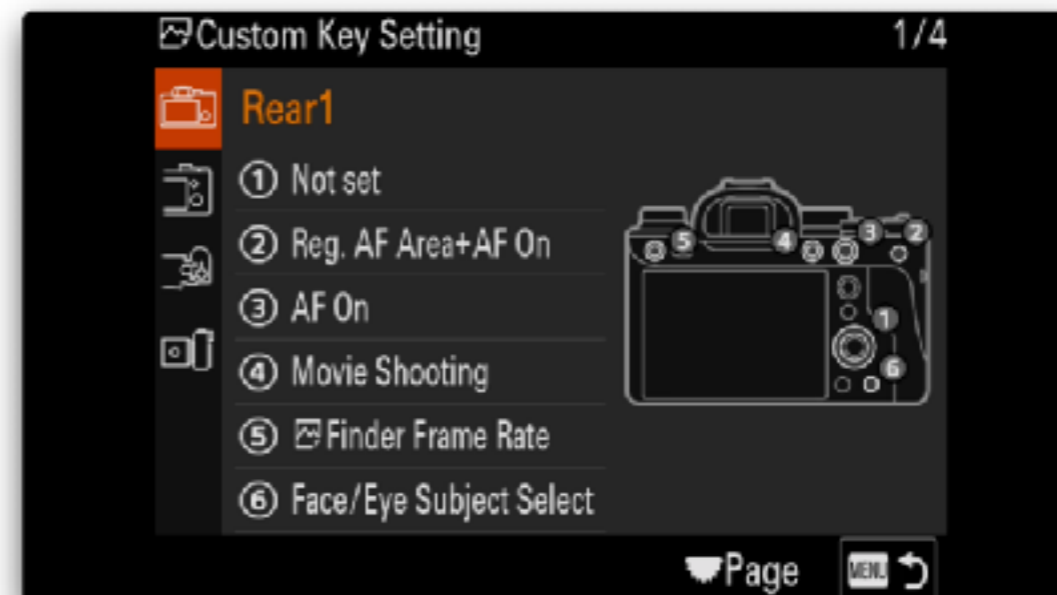
2 - Registers AF Area + AF On

3 - AF On

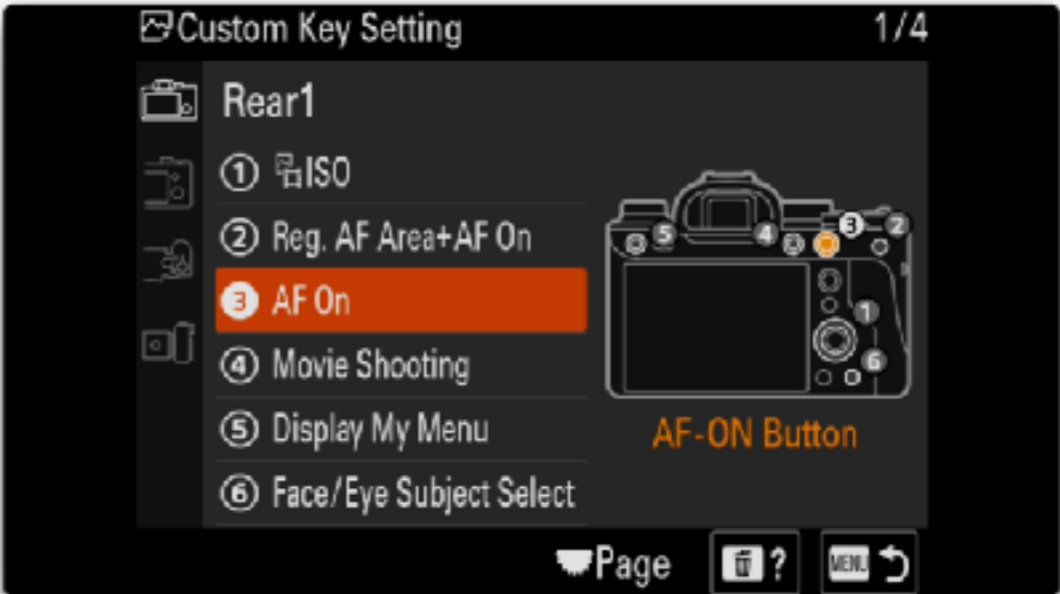
4 - Movie Shooting

5 - Display My Menu

6 - Face/Eye Subject Selection



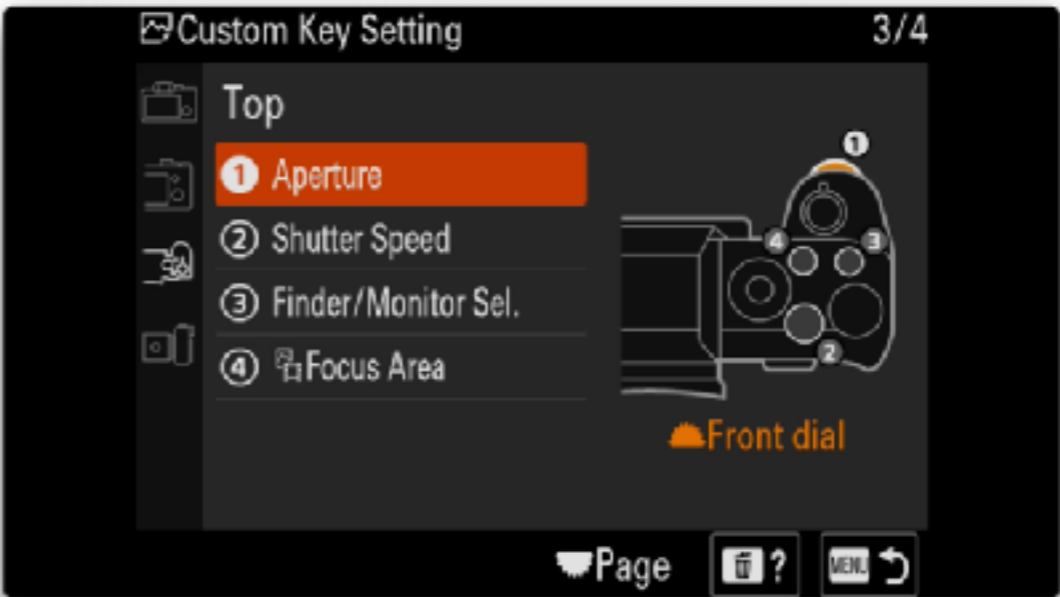
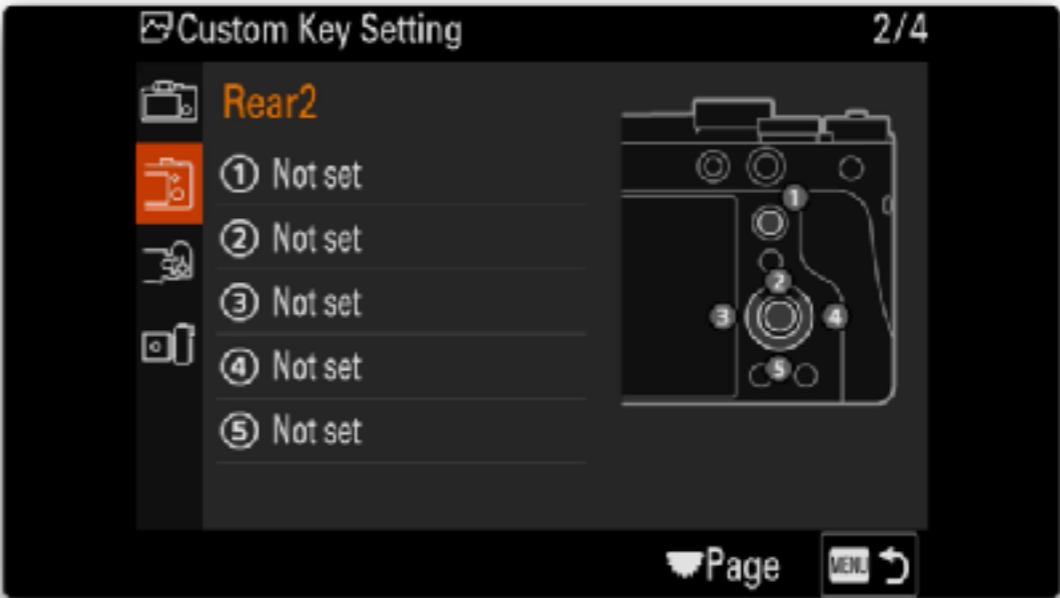
Setup Menu - Operation Customise



Setup Menu - Operation Customise

Rear2

- 1 - Not Set
- 2 - Not Set
- 3 - Not Set
- 4 - Not Set
- 5 - Not Set



Setup Menu - Operation Customise

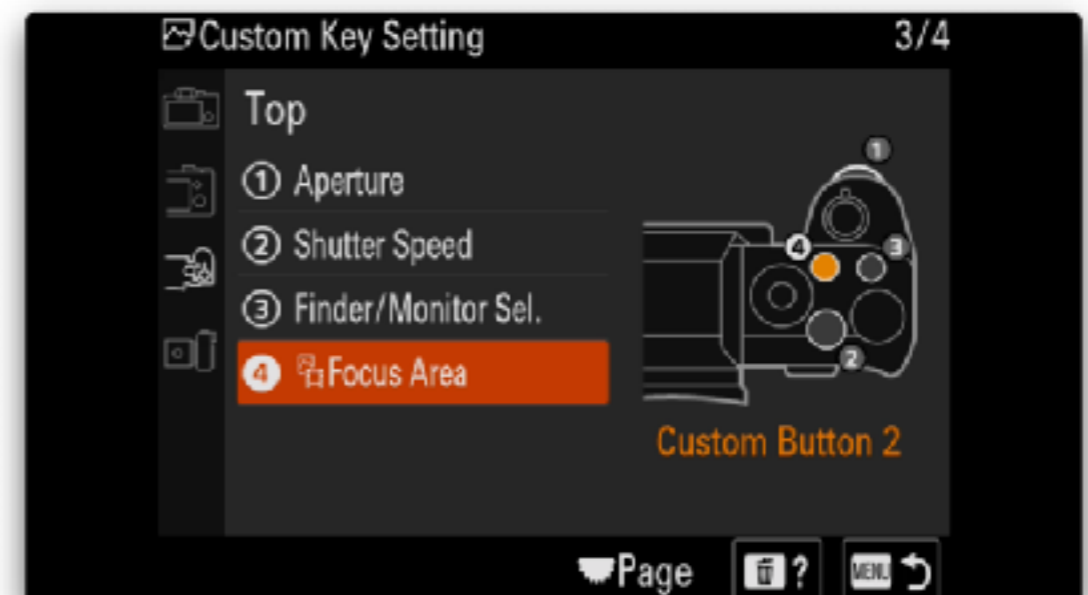
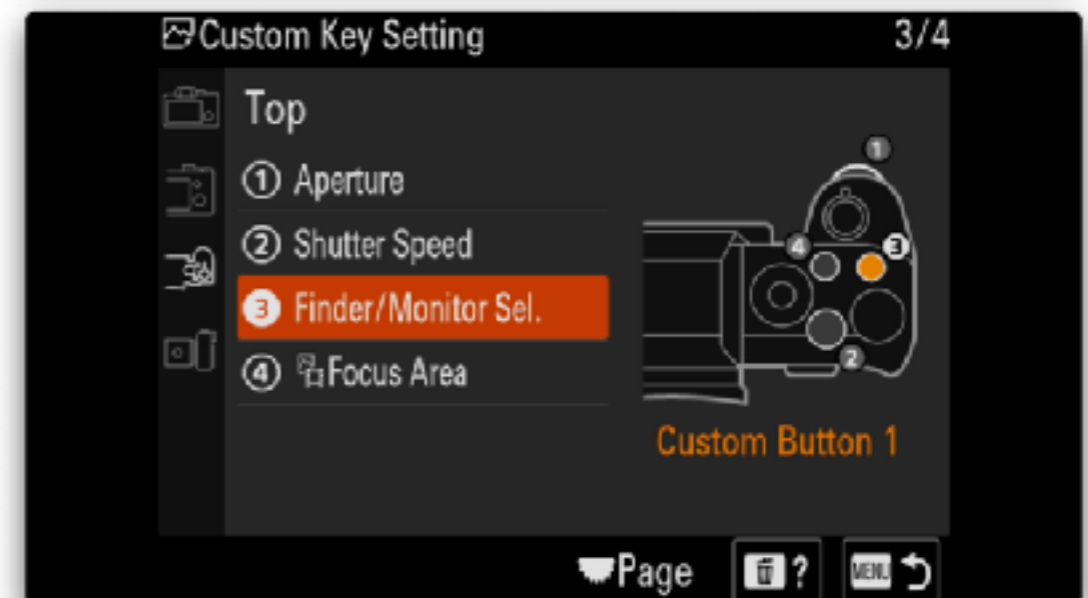
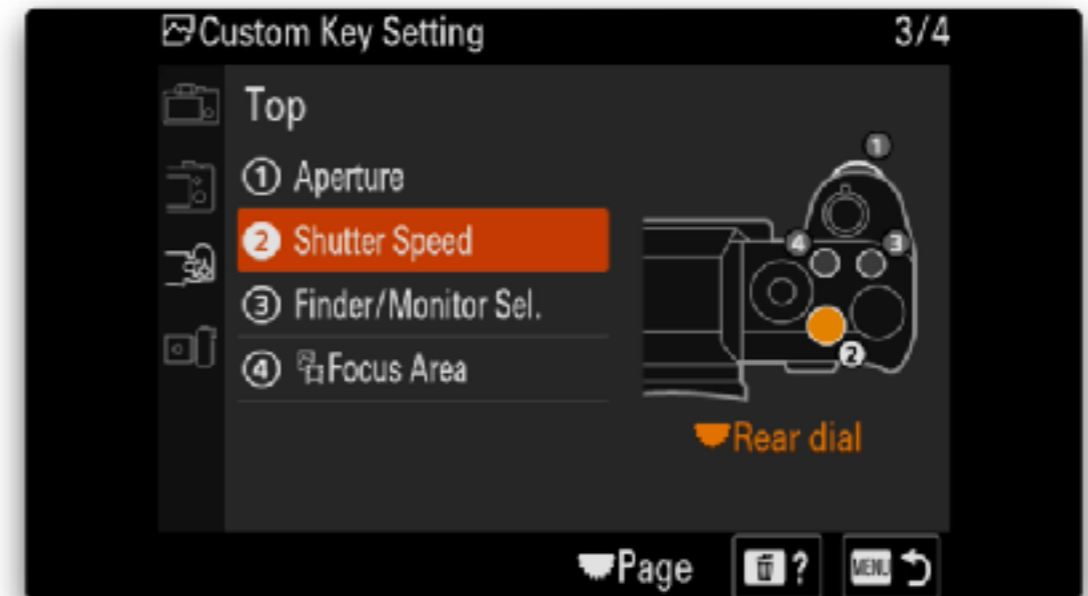
Top

1 - Aperture Dial

2 - Shutter Speed Dial

3 - View Finder/Monitor Toggle

4 - Focus Area Toggle



Setup Menu - Operation Customise

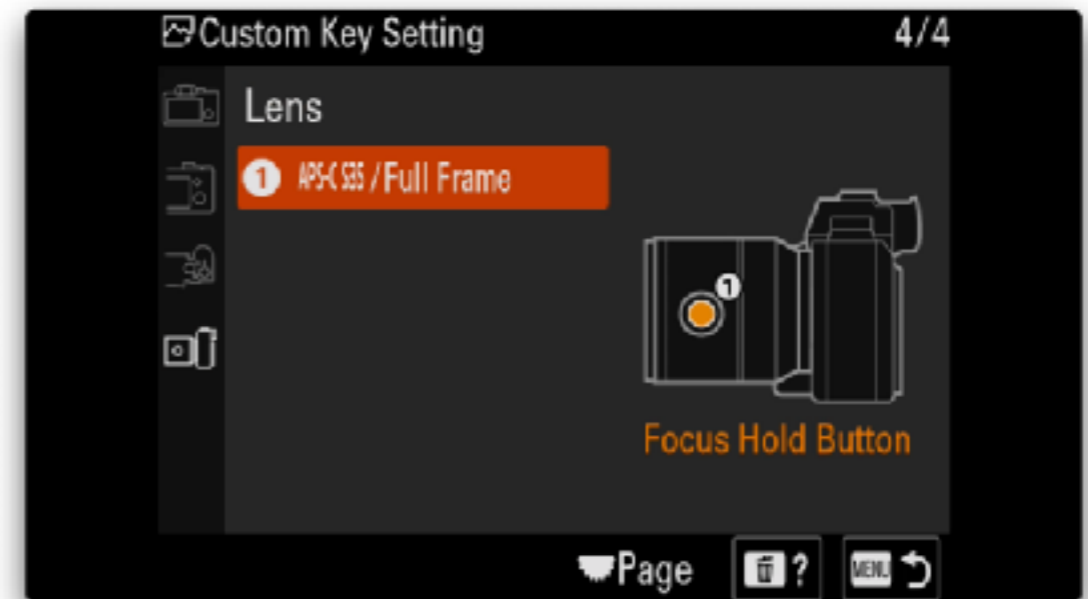
Lens

1 - APS-C/Full Frame mode toggle

OR

1 - AF/MF Hold and use this in conjunction with the Focus Peaking Display setting to see the plane of focus.

Focus with the camera and then press the AF/MF Hold button and slightly turn the focus ring - the view should magnify by the Peaking Display setting and become a spotting scope.



Tips for Sharp Images

Finding it hard to get tack sharp images?

There are many reasons for blurry images but the main reason is technique. Camera's and lenses can only do so much, the rest is up to the user.

The following tips might help you diagnose why your images are not as sharp as you would like.

Note: *This section is not specific to any camera brand.*





Sony Alpha 9 200-600 TC1.4 @360mm 1/160s f9 iso1250 handheld

Step 1: Make sure your 'equipment' is working - and I don't mean the camera or lens, we'll get to them later

Step 2: Determine how sharp your camera and lens combination can be - this will set the 'benchmark' for what you should be able to achieve

Step 3: Analyse your images - to determine whether there is room for improvement in technique or whether you are being limited by your equipment

Step 4: Determine why your images are not as sharp as they could be - now you can work on improving things



Nikon D850 500PF @500mm 1/2500s f9 iso1000 is:panning handheld from 3+km

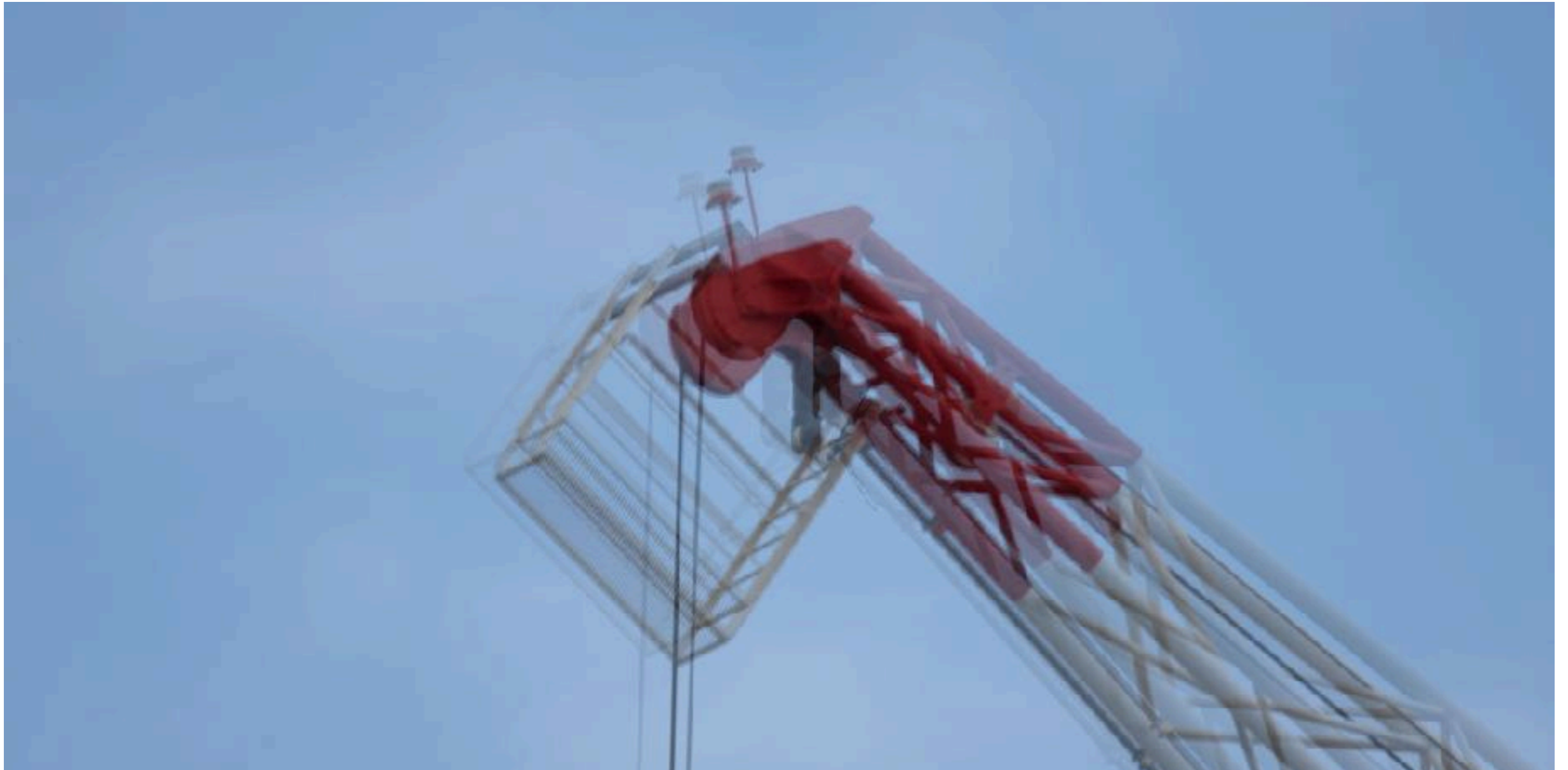
Step 1: Establishing how good your technique is

Before we worry about equipment let's first establish how well we can take images of fine detail from a long way away.

We do this by finding a static subject on a clear day, preferably in the morning before the sun gets too high in the

sky. The perfect subject to use are buildings where there is some construction work underway.

Use camera settings similar to those in the image on the previous page and whatever the maximum reach of your longest lens is (without any adapters on for now) and capture a number of images as quickly as you can in single shot.

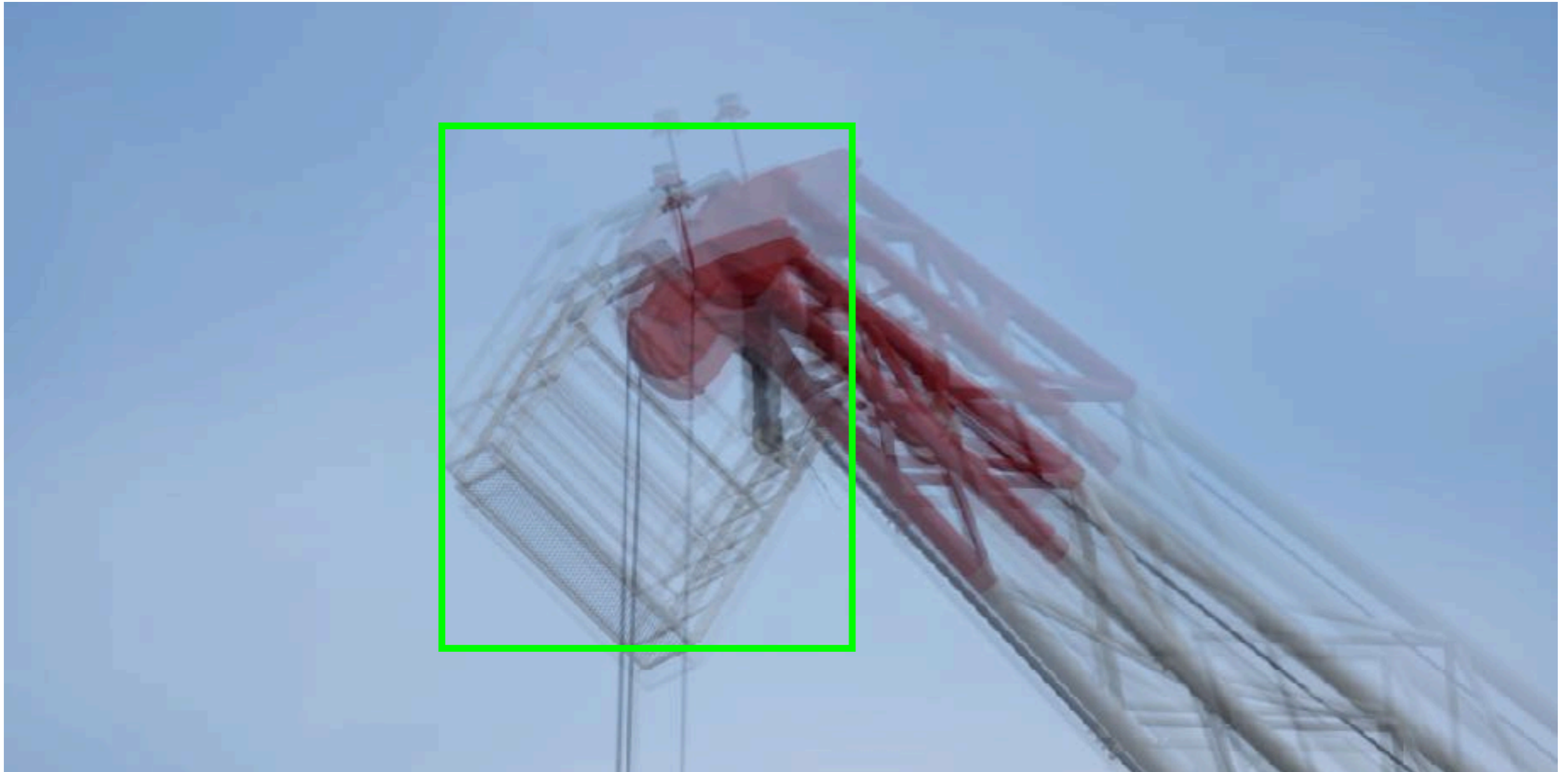


Nikon D850 500PF @700mm 1/100s f8 iso64 is:panning handheld from ~100m

How steady are you

So while the single image on the previous Page is very sharp and shows no signs of blurring the image on this page shows a number of consecutive images merged on top of each other.

What this shows is the amount of camera movement occurring between each image which gives some idea of the amount of movement the camera image stabilisation system needs to deal with. Now do the same exercise in continuous shooting mode and establish just how much lens movement is going on. Test it out with image stabilisation on and off.



Nikon D850 500PF @700mm 1/100s f8 iso64 is:none handheld from ~100m

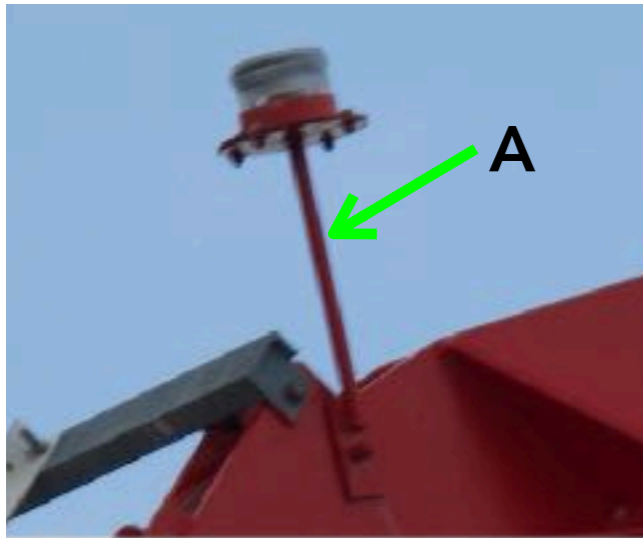
Image Stabilisation

This image shows the amount of movement with no image stabilisation turned on

As you can see there is quite a bit more vertical movement, bearing in mind that the previous images were taken using

Panning(or sports mode) which stabilises vertical movement only since the camera expects you to be tracking horizontally and so no point trying to counter that motion.

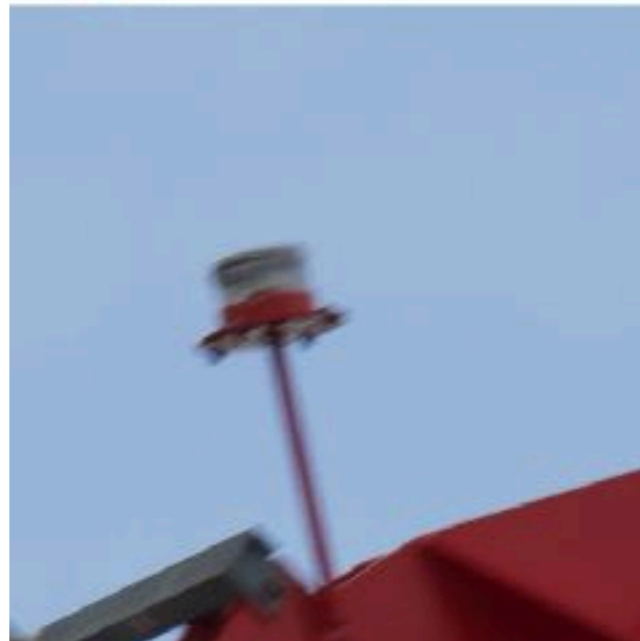
Regardless of whether you have image stabilisation on or off you will encounter some movement of the image unless you are using a tripod and even then it is worth checking.



1



2



3

Taking a closer look at the individual images taken without image stabilisation we can see that we still managed to get one sharpish(!) image.

So we know that our equipment is at least capable of doing better than what is showing in the other 4 images.

Bear in mind that these images were taken with a slow shutter speed of 1/100s and at a focal length of 700mm so without the help of image stabilisation or a stable tripod it will be near impossible to get sharp images.

At a minimum you should be getting A.



1



2



3

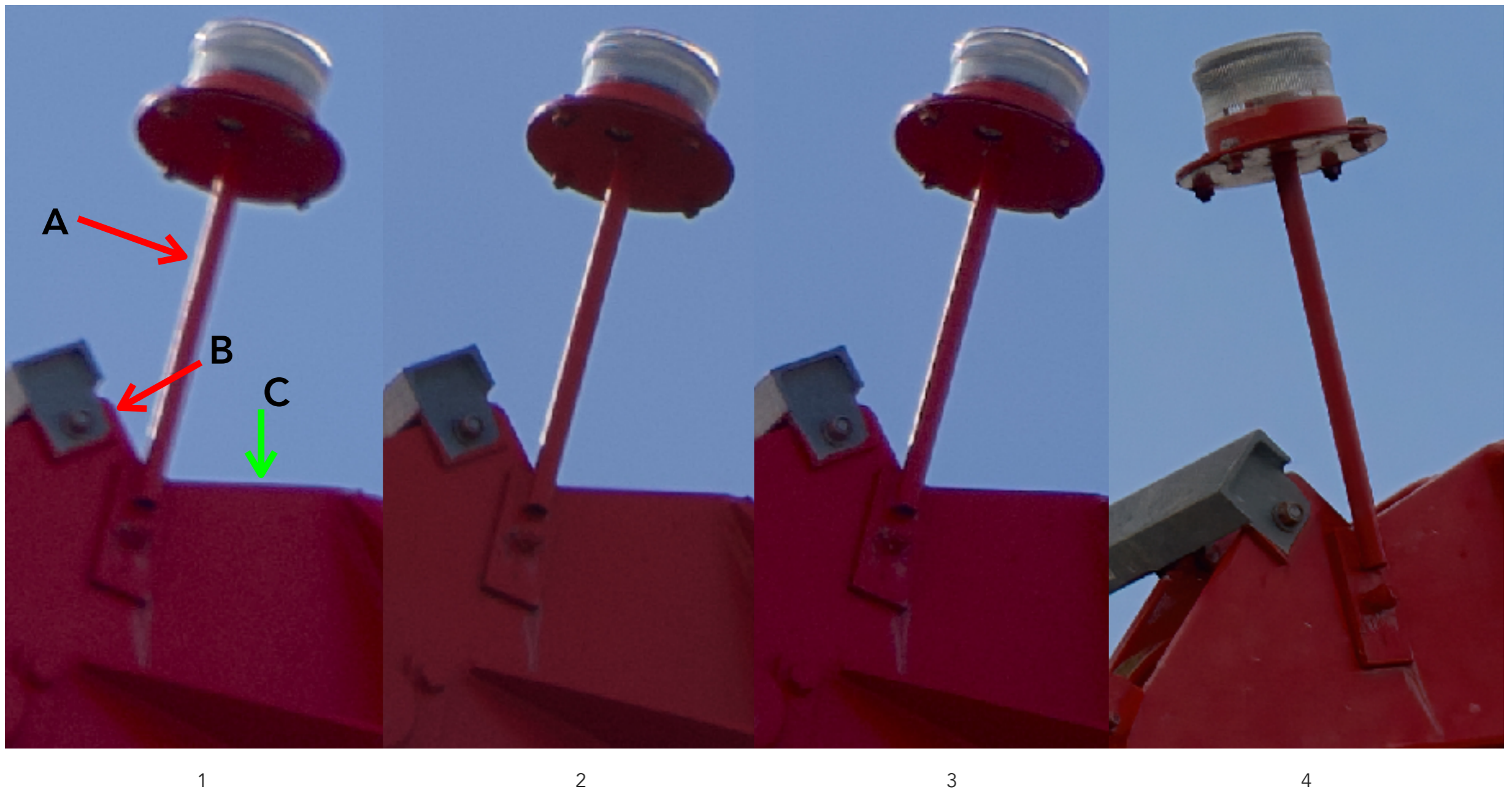


4

Let's take a closer look at the images to see what we can find.

1. Clearly the main image is tack sharp with the cables, crane structure and building lines showing as fine detail.
2. Zooming right in to 100% shows the same

3. And zooming in even further until we see some pixelation we can see there is no evidence of any vertical or horizontal blurring or double lines.
4. In this image we can see the same subject from two other cameras were there is noticeably less sharpness but still no evidence of any horizontal or vertical blurring.



So what does it mean if there is vertical or horizontal blurring evident in the images ?

1. Here we can see the vertical lines appear to have double images while the horizontal lines, while not sharp don't show double artefacts

2. In this image there is no sign if any such artefacts

3. And in this image the lines are even sharper. In addition the definition in the light is starting to become more evident

4. And a processed image from a ultra-sharp prime lens



Sony Alpha 9 200-600 @600mm 1/2000s f6.3 iso5000 is:standard handheld at 6m

FAQ:

1) Why not lossless compressed?

I do explain that lossless compressed means you can't get 30fps - so if you don't need 30fps definitely use lossless compressed.

Take a look at the videos on the following pages to see how many compositions you would miss shooting at slower FPS.

I would rather the best wing positions/compositions than a barely noticeable improvement in dynamic range.

Sony Alpha 1 BIF Test



A sequence of 44 images with many great shots of the outstretched wings to choose from from 1.5 seconds of 'action'.

If you are shooting at 5 frames per second you would be lucky to get any of the wings in a good position.

At 20 fps there is 30% less chance of getting that perfect pose where everything lines up.

This was a test in the back yard so the background is not ideal for keepers.

Sony Alpha 1

200-600+TC1.4
SD Card(300MB)



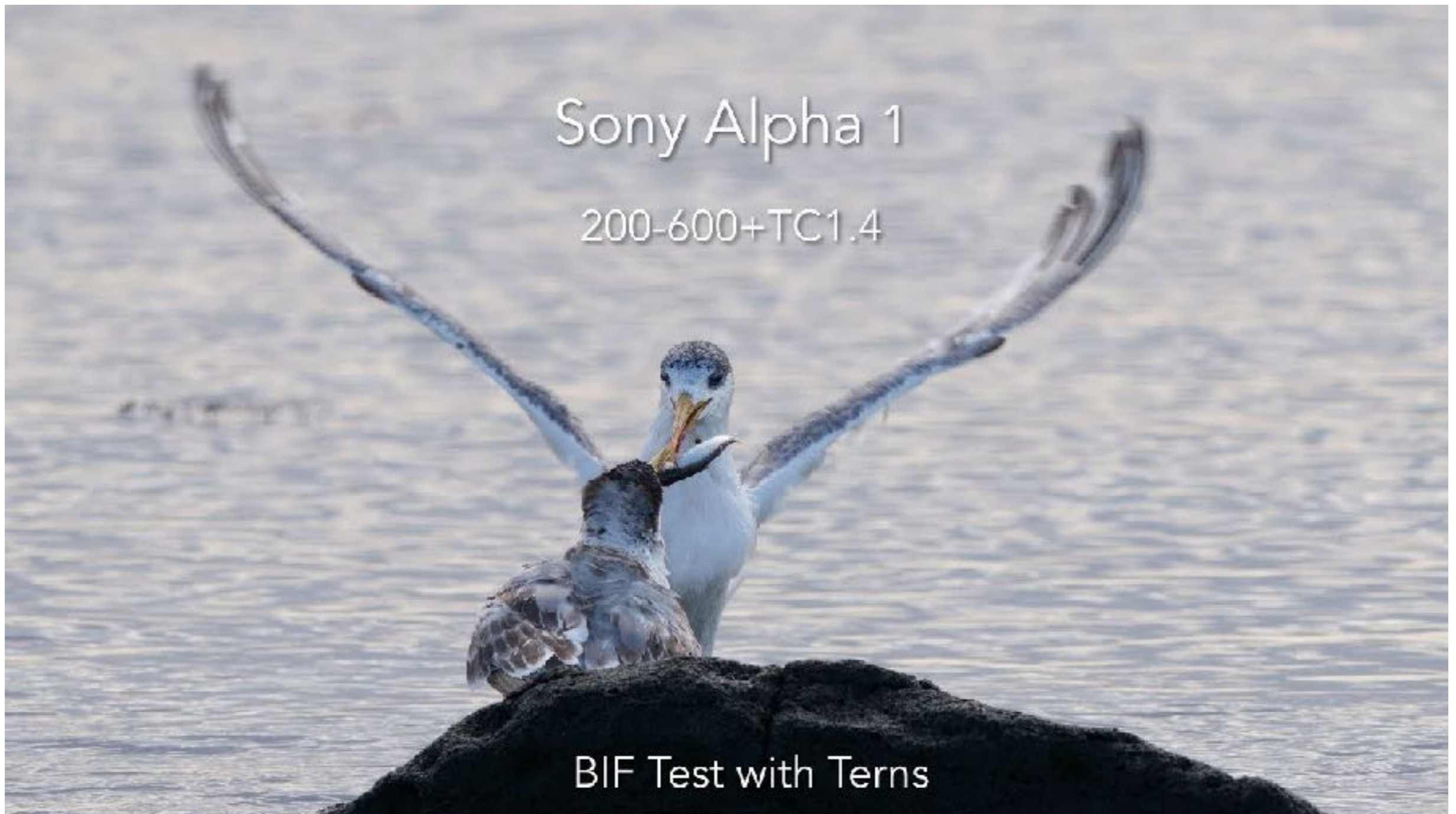
BIF Test with New Holland Honeyeater

Another much longer sequence of a New Holland Honeyeater catching bugs.

Who would have know they stack them up in their beak like a guinea-pig filling its cheeks.

Out of the hundred odd images there are a number of great images where the bug and the bird is in focus and in a good position.

Reducing the shutter speed substantially reduces the chance of getting a great image with the fast little birds.



And finally a sequence of shots of a tern catching a fish, dropping it and diving to retrieve it again, then nearly losing it as it breaks apart - *not for fish lovers* - and finally flying in to feed its chick.

Once again without the high frame rate many of the little subtle movements would not be picked up. If you watch carefully you can see how the parent hand the fish to the chick and then does a quick little movement to rotate the fish so it is pointing head first into the chicks mouth.



Sony Alpha 1 200-600 TC1.4 @840mm 1/40s f9 iso250 is:standard handheld at 120m

2) Why not set minimum shutter speed along with auto ISO?

I only shoot in manual and control the shutter speed. Mostly just shooting aperture wide open for wildlife to get the most light on the sensor with the best light is morning/evening so it's a pinch at the best of times anyway.

Shutter speed could change from 1/40 to 1/8000 at a moments notice depending on what is happening out there.

See this one above taken in very low light at 1/40s at 120 meters. But if the sun breaks through a second later...

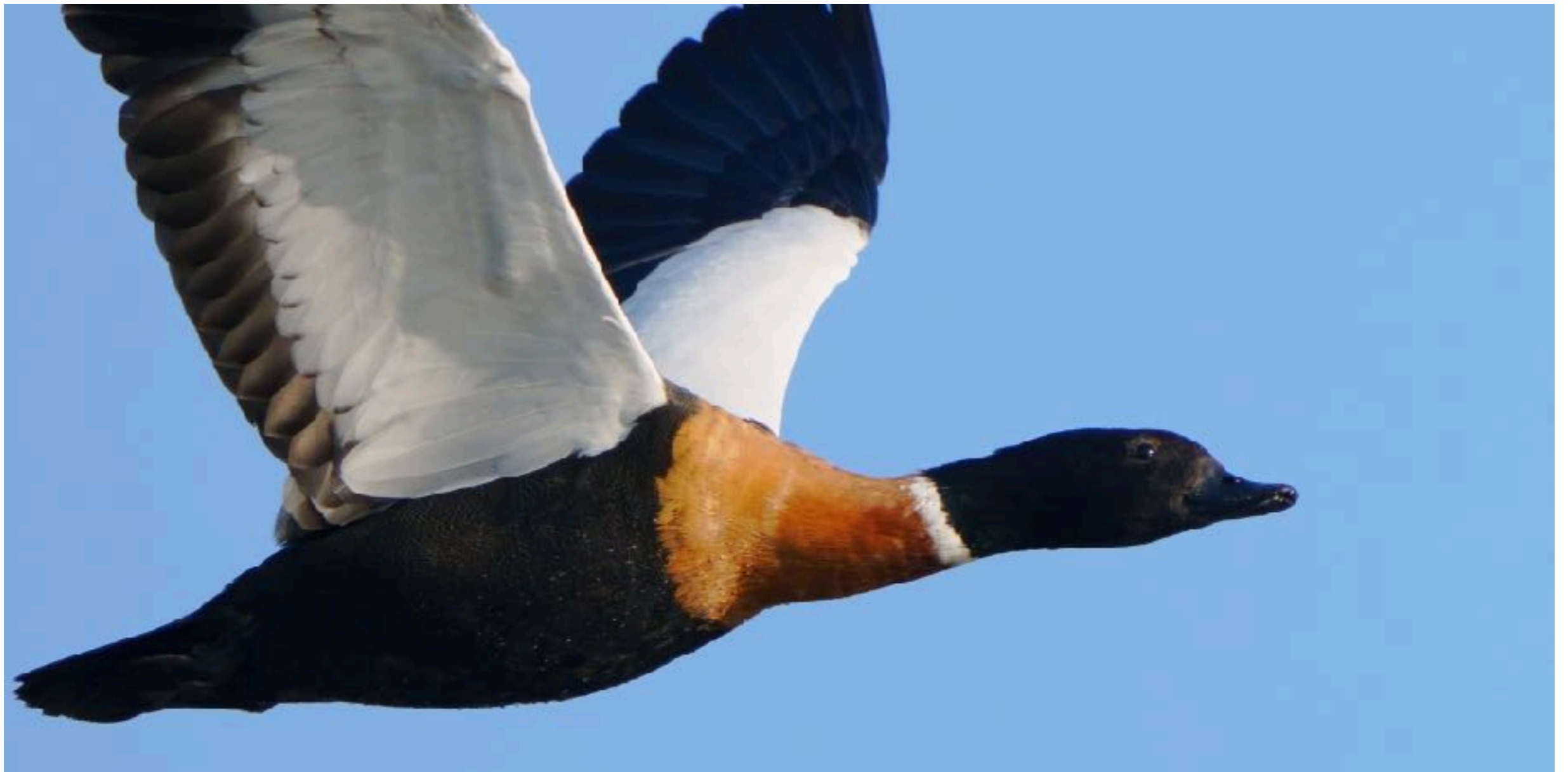


Sony Alpha 1 200-600 TC1.4 @840mm 1/1600s f9 iso6400 is:standard handheld at 120m

Or the bird decides to take flight....

Note the low shutter speed in an unsuccessful attempt to get enough light on to the sensor to keep the iso level down.

Even with noise reduction the image is lacking any real detail.



Sony Alpha 1 200-600 TC1.4 @840mm 1/3200s f9 iso2500 is:panning handheld at 40m

In better light you can use a higher shutter speed and still keep the iso levels in a usable range.

If you look under the wings you can see signs of noise and lack of detail in the shadows but the rest of the image is pretty decent.



Sony Alpha 1 200-600 TC1.4 @840mm 1/4000s f9 iso2000 is:standard handheld at 20m

A blindingly sharp image at 1/4000s with perfect light.



Nikon D850 200-500@500mm 1/4000s f7.1 iso640 is:standard handheld at 30m

And the Nikon colour magic which a high shutter speed for a sharp image with great eye detail