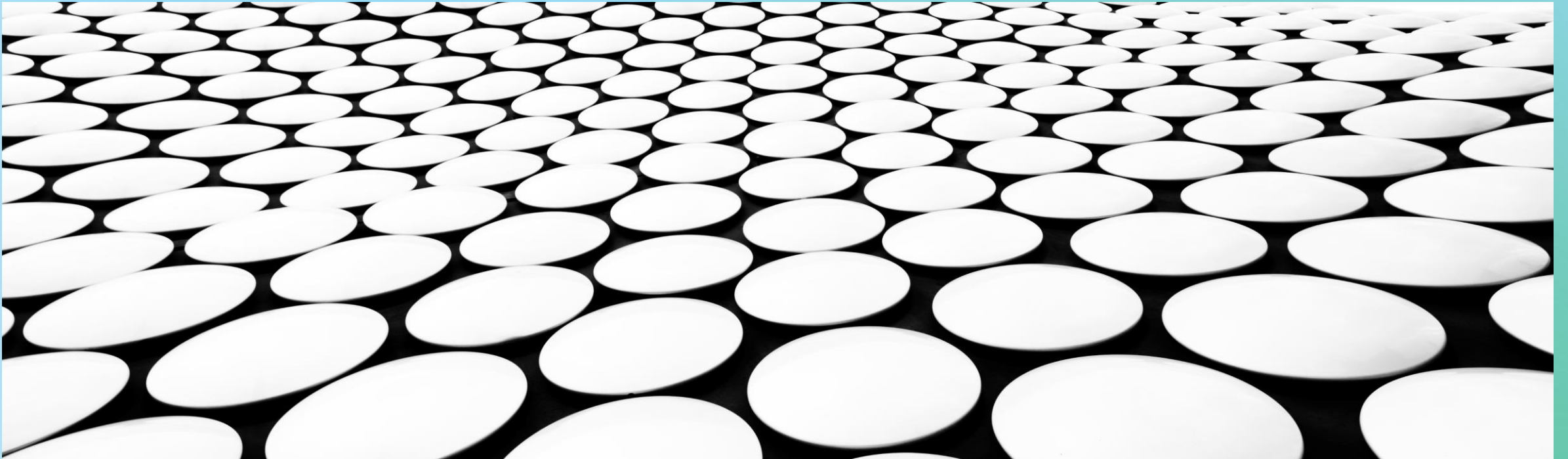

KNOW YOUR CAMERA....AND ITS FEATURES

EVERY CAMERA IS DIFFERENT, ARE YOU USING ALL YOU PAID FOR?



WHAT SETTINGS AND FEATURES DOES YOUR CAMERA HAVE, AND CAN YOU USE THEM AND FIND THEM?

THIS GUY THOUGHT BOUNCING HIS FLASH OFF THE CLOUDS AT 20,000 FT WOULD WORK AT THIS OUTDOOR WEDDING SHOOT IN JAPAN.

THE FLASH KEPT FIRING, BUT IF HE WAS SHOOTING IN TTL MODE IT WOULD HAVE MADE NO DIFFERENCE. DID HE UNDERSTAND, AND WAS JUST TOO LAZY TO TURN IT OFF?



STEPPING BEYOND AUTO

- *Almost* every camera has a green square which equates to fully automatic' mode, or some way of setting the camera to 'point and shoot' mode. In this mode the camera makes all the decisions, sets shutter speed, aperture, ISO, white balance, colour profile, and usually only produces JPEG images. Often based on a memory bank of thousands of typical scenes it is an 'average mode' used to make average photographs.
- *Q. Why do we need to use any setting other than what the very clever camera manufacturers have given us in full auto mode? Can't my camera do everything? Don't I just need to focus, frame and shoot?*
- *A.* Any DSLR or mirrorless camera made in the past decade or two is a very sophisticated machine, filled with computing power, data bases of scene memory and complex features. True innovative tech marvels, - and at first bewildering in their apparent complexity.
- What these marvels of technology cannot do is know what you are pointing your camera at, why you are pointing it, what you are trying to capture, or what your envisioned image looks like in your imagination.
- They also have certain technical limitations in such things as dynamic range, colour temperature (white balance) and a pre-programmed tendency towards 18% grey, or middle grey. Left in full auto settings, your camera will turn a capture of a black cat in a coal mine into a slush of grey. It tries to brighten the blacks and darken the whites.



Typical PASM control wheel

WHAT IS 'CORRECT EXPOSURE'?



- Your camera is programmed to give 'correct' exposure in auto mode, but what is correct exposure?
- It is whatever YOU decide it is.

SEMI AUTO MODES – APERTURE AND SHUTTER PRIORITY



- Most folk start out shooting in auto mode when they begin their photographic journey. This is perfectly understandable, and often all that is required to take family snaps and in non-challenging situations.
- Semi-automatic modes such as Aperture Priority (A, or AV depending on your camera) allows the photographer to set the amount of light entering the lens diaphragm, and then to expose the sensor.
- Aperture Priority also controls depth of field. – How blurry the foreground and background are to look. Also known as background blur or ‘bokeh’
- Shutter speed, (S or Tv) allows the photographer to determine the amount of time it takes to open and close the shutter (or apply power to the sensor in mirrorless bodies) and thereby expose the sensor to light.
- Shutter speed allows the photographer to control subject blur and movement/sharpness. High shutter speeds can be useful in fast moving sports for example. Slow shutter speeds can smooth out water or clouds and give a silky look or give a sense of movement in a scene.

OTHER SEMI-AUTOMATIC MODES



Some cameras rely on dedicated dials for shutter, EV comp and ISO. Aperture is set on the lens

- Program mode (P) is one step away from fully automatic mode in that the user decides on one factor of the exposure triangle, and the camera automatically adjusts the other two, to give what it thinks is 'correct' exposure. My brief research shows that P mode is approached in different ways on Canon, Nikon, Pentax and Fuji cameras, so you need to find out how it works for your make and model and if it is something useful to your style of shooting.
- Sensitivity Value (Sv) [not to be confused with Speed value!] Pentax has a setting where the ISO has priority over shutter and aperture. To date I have never found a use for this mode.
- Manual mode with auto ISO (TAv in Pentax, a menu setting in other camera's) Basically similar to Program but allows the user to shoot in constantly varying lighting conditions and allows the camera to decide the correct ISO setting for 'correct' exposure.
- Exposure compensation is used to bias your camera's meter to over or under expose what it 'thinks' is 'correct' exposure. Remember the black cat? Usually a +/- button on most camera's, (a top plate dial on Fuji's) it allows the shooter to change the mid-point of the exposure.
- Scene modes – only if you absolutely must....

MANUAL MODE

- Total control over you.
- Most useful in difficult conditions (bright lights against a dark night sky, for example) or when you need the exposure to remain the same for various shots under changing lighting- such as a panorama.
- Or for when you want to feel that you are the one making decisions and have the time to do so - shooting on a tripod in a studio or making a long exposure landscape. The mode for contemplation and consideration, maybe?



Even film cameras have various modes and aides

CAMERA FEATURES

- Your camera is not the same as mine. Yours will have features unique to the manufacturer, make and model. Generally, what we pay for in more and more expensive camera bodies as we move higher in the marque are better performance, better build and better features. It is unrealistic expect a 10yo entry level camera to have all the same features of a current flagship camera selling for multiples of the base model's price.
- Here is a list of just 'some' features found in various camera's –

IBIS, Focus stacking, multiple exposure, pixel shift resolution, eye detect autofocus, star tracking, image bracketing, focus peaking, over and under exposure warning, high speed frame rate, interval shooting, star stream. mirror lock up, bulb mode, film simulations, custom white balance, self-timer, highlight and shadow correction, moire reduction, long exposure noise reduction, movement tracking. HDR, WiFi, GPS, file size and type.

The list is not exhaustive.

- Your camera may have dedicated buttons for various functions, maybe customisable buttons you can set to your commonly used features, or maybe these features may require some 'menu diving'. Every make and model is different.



OTHER THINGS TO THINK ABOUT

Just when you thought I was done....



- Metering modes – spot, evaluative, average, full coverage, centre weighted.
- Focus modes – Continuous (Ai servo) or single? Focus points? Single? Maximum?
- White balance* – Auto? Daylight? Tungsten? Etc
- Picture style* - Natural, saturated, landscape, flat, neutral, B&W?
- Capture format – Jpeg or Raw? Both?

*only permanently applicable to JPEGS

OK, I'M DONE

- I challenge you to get to know what your camera can and cannot do. Experiment, investigate, ask for help, google search.....

-but please, move past auto.

