

Automatic & Programme Modes

- With a new camera (*& if there's little time or inclination to "RTFM"*) it's tempting to leave it in “Automatic” or “Programme” Mode to do the “hard work” of setting exposure parameters.
- However, that can result in pictures that are:
 - Too light due to **over**-exposure
 - Too dark due to **under**-exposure
 - Blurred due to the “target” having moved very fast &/or “camera shake” at low Shutter Speeds in poor light.
 - Blurred due to little “Depth of Field” at wide apertures.
 - Have colour casts due incorrect selection of the type of lighting (e.g. “*fluorescent*” instead of “*daylight*”, or VV)

“Automatic” Exposure modes

- “Auto” (“Automatic”)
 - NO manual control possible as the camera uses pre-programmed Shutter Speed & Aperture combinations, e.g. *the fastest Shutter Speed & smallest Aperture in bright light, and gradually lowering the Shutter speed and opening the Aperture as the light level decreases – until it reaches “the limits”!*
- “P” (“Programme”)
 - Like “Auto” but **you** have some ability to adjust Shutter Speed &/or Aperture, and camera then selects the ISO sensitivity setting.
- “Auto-ISO” / “Hyper Program Mode” (also Pentax “TAV” mode)
 - **You** have full manual Shutter Speed & Aperture control, and the camera then selects ISO “Sensitivity” settings within the max/min limits **you** pre-set in the menus.
(NB: in (at least) the “P” & Auto-ISO/Hyper Programme Modes, if the manual settings mean that the ISO limits will be exceeded, you generally get warnings on-screen or in the viewfinder).

“Scene”, “Intelligent Auto”, “AWB”

- “Scene” Modes –

Like “Auto” but **You** manually select a “Scene” mode (*e.g. “Portrait”, “Action” “Night-time”, “Indoor”*) & the camera then “selects” & adjusts the Aperture & Shutter Speed settings from internally pre-set combos.

- “**Intelligent Auto**” (“IE”) = “Auto” & “Scene Mode” **combination**.

The **Camera itself** uses “scene mode detection” to try to identify the “scene” & select an appropriate Aperture/Shutter Speed setting.

- “**Auto White Balance**” (“AWB”)

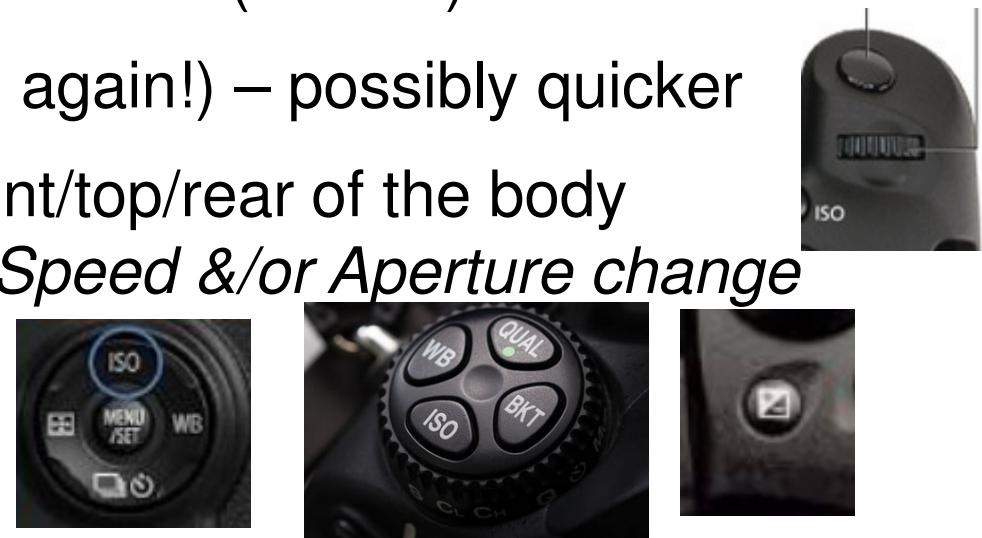
- Like a “Scene” mode because the Camera tries to determine the “type of lighting” & apply appropriate electronic colour corrections.

Often works well, *but sometimes not and so pics have colour casts*
– which have to be corrected later in post-processing
(although it can sometimes be done in the cameras themselves).

So, check if you have *Manual White Balance* control, so that you can then select & adjust the Balance to suit the lighting conditions.
(typically there are 4-6 manual modes with illustrative screen icons)

Making Exposure Adjustments

- Shutter Speed, Aperture, &/or ISO adjustments can be made:
 - Via menus – varies between cameras (RTFM!) and “slow”
 - Via a rear touchscreen (RTFM again!) – possibly quicker
 - 1 or 2 serrated “wheels” on front/top/rear of the body
 - *often used for direct Shutter Speed &/or Aperture change*
 - Dedicated buttons like these:



*Used with “wheel” for Shutter Speed, Aperture, &/or ISO changes or for **Intentional** Under/Over exposure adjustments*
-> press the button and then turn the wheel whilst watching “the numbers” on the screen or through the viewfinder.

- “Exposure bracketing” to automatically take a series of shots at smaller & wider apertures – typically via menu selections or a movable switch around & below a control dial

“Semi-Manual” & “Manual” modes

- Greater control can sometimes be achieved using the Semi-Manual and Manual modes on many cameras, notably:
- “A” “Av” (“Aperture value”) = “Aperture priority”
 - You change the **Aperture** & the camera changes the Shutter Speed to get same exposure (*but does not change the ISO*)
- “S”, “T”/“Tv” (“Time” / “Time value”) = “Shutter priority”
 - You change the **Shutter Speed** & the camera changes the Aperture to get same exposure (*but does not change the ISO*)
- “M” “Manual”
 - You have complete Aperture/Shutter Speed /ISO control!
- “B” (“Brief”/ “Bulb”)
 - Like “M” but Shutter stays open as long as button is depressed
- “Delayed action” (works in all/most modes)
 - button-press/menu-press to engage, then press “shoot” “button” for 2->10s delay (*depends on camera!*) before shutter fires.

“OK, but I can’t change modes!

- Then you need a better understanding of what/what not to do with the camera -> a few suggestions:
 - Test Scene Modes to find out for what each “good” or “poor”
 - Experiment in very light/dark indoor/outdoor conditions to find the “limits” of what works/doesn’t work.
 - Take care with lighting angles to avoid shots with both very bright and dark areas
 - Shoot moving objects using “panning” & “pre-focus methods to improve your skill (*helps with shutter speed –issues*)
 - Look for things to lean against when the light is poor
 - If possible, choose your shooting location & position carefully
 - Practice your post-processing so as to be able improve the shots the camera produces