






WHITE BALANCE:

MOST LIGHT SOURCES ARE NOT 100% PURE WHITE BUT HAVE A CERTAIN "COLOR TEMPERATURE". FOR INSTANCE, THE MIDDAY SUNLIGHT WILL BE MUCH CLOSER TO WHITE THAN THE MORE YELLOW EARLY MORNING OR LATE AFTERNOON SUNLIGHT.

NORMALLY OUR EYES COMPENSATE FOR LIGHTING CONDITIONS WITH DIFFERENT COLOR TEMPERATURES. A DIGITAL CAMERA NEEDS TO FIND A REFERENCE POINT, WHICH REPRESENTS WHITE. IT WILL THEN CALCULATE ALL THE OTHER COLORS BASED ON THIS WHITE POINT. FOR INSTANCE, IF A HALOGEN LIGHT ILLUMINATES A WHITE WALL, THE WALL WILL HAVE A YELLOW CAST, WHILE IN FACT IT SHOULD BE WHITE. SO IF THE CAMERA KNOWS THE WALL IS SUPPOSED TO BE WHITE, IT WILL THEN COMPENSATE ALL THE OTHER COLORS IN THE SCENE ACCORDINGLY.

MOST DIGITAL CAMERAS FEATURE AUTOMATIC WHITE BALANCE WHEREBY THE CAMERA LOOKS AT THE OVERALL COLOR OF THE IMAGE AND CALCULATES THE BEST-FIT WHITE BALANCE. HOWEVER THESE SYSTEMS ARE OFTEN FOOLED ESPECIALLY IF THE SCENE IS DOMINATED BY ONE COLOR, SAY GREEN, OR IF THERE IS NO NATURAL WHITE PRESENT IN THE SCENE.

MOST DIGITAL CAMERAS ALSO ALLOW YOU TO CHOOSE A WHITE BALANCE MANUALLY, TYPICALLY SUNLIGHT, CLOUDY, FLUORESCENT, INCANDESCENT ETC. PROSUMER AND SLR DIGITAL CAMERAS ALLOW YOU TO DEFINE YOUR OWN WHITE BALANCE REFERENCE. BEFORE MAKING THE ACTUAL SHOT, YOU CAN FOCUS AT AN AREA IN THE SCENE, WHICH SHOULD BE WHITE OR NEUTRAL GRAY, OR AT A WHITE OR GRAY TARGET CARD. THE CAMERA WILL THEN USE THIS REFERENCE WHEN MAKING THE ACTUAL SHOT.

-  **AWB** AUTO
camera sets white balance
-  **DAYLIGHT**
camera adds warm tones
-  **CLOUDY**
camera adds warm tones
-  **SHADE**
camera adds warm tones
-  **TUNGSTEN**
camera adds cool tones
-  **FLUORESCENT**
camera adds warm (red) tones
-  **FLASH**
camera adds warm tones
-  **CUSTOM**
photographer sets white balance