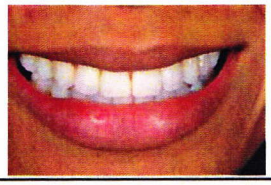
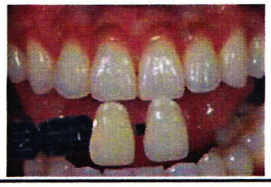
PHOTO COMPOSITION

With well calibrated equipment, it's now in the hands of user to obtain an image that transfers intraoral conditions. Manual focusing with specific magnification is recommended since automatic focusing might generate blurred area where detail capture is necessary. It is important to set magnification ratio first and move the camera in and out to achieve proper focus on teeth. For color communication, positioning shade tabs below or above, on the same plane as teeth will help in correct color interpretation. Shade tabs that are positioned forward might be out of focus and will appear brighter do to stronger illumination form the flashes, generating false color perception.

	TYPE	MAGNIFICATION	APERTURE	SHUTER SPEED
	FACIAL	**1:10**	f9-11	1/125
	FACIO-ORAL	**1:3**	f22-32	1/125
	INTRA-ORAL	**1:3**	f22-32	1/125
	SHADE	**1:2**	f32-36	1/125
	CLOSE UP	**1:1**	f36-45	1/125

BASIC CAMERA SETTINGS:

After selecting the D-SLR equipment, it is necessary to calibrate it for intra oral photography. Main items to consider are white balance, depth of field and correct exposure. Exposure is a product of aperture opening, shutter speed and ISO film/sensor sensitivity. ISO should be set to 100 (or the lowest value your cameras support), lower the number less grainy image appears, but at the same time more light needs to be delivered to the sensor. Shutter speed has to be set to 1/125s or faster to eliminate any blurring due to patient movements or shaking of the camera. Aperture size controlled in f-stops is recommended to be a minimum f22. The important aspect for a small opening is to gain adequate depth of field which determines the extend of sharp focus. Next component that has to be adjusted is white balance (WB). The reason that pictures turn out with a yellow/orange cast in incandescent (tungsten) lighting and bluish in fluorescent lighting is because light has a colour temperature (Kelvin). A low colour temperature shifts light toward the red; a high colour temperature shifts light toward the blue. In digital photography, we can simply tell the image sensor to do that colour shift for us. Most accurate method would be utilizing 18% gray card in custom setting menu. This makes sense in professional photography. In everday practice it's advisable to select either the "Cloudy" WB setting or select directly a temperature of 5500 K in order to reproduce colors. Power output on electronic flashes might need to be adjusted to 1/2 or 1/4 power, dependent on position and intensity of illumination of the flash. Latest cameras and flash use TTL measurement and one doesn't need to take care of the power output of the flash system. Final corrections and fine tuning of settings are always done to personal preference.

-Manual mode: M

-Manual focusing: MF

-Aperture: f22 - f32

-Shutter speed: 1/125s

-ISO: 100

-White Balance(WB): Custom or Cloudy(~5500*K)

-Flash output: 1/2 or 1/4 power (for non TTL flash)

-Image size maximum - JPG fine

-Turn Gridlines on for easier orientation