

DSLR Camera – Dentistry

Settings

Camera and lens set to: M / MF (Manual focus)

Shutter speed: 1/60

Aperture: 14

ISO: 100

White balance: Ring flash.

Exposure compensation : 0

Flash Exposure compensation: 0

Picture style: Neutral

Auto Lighting Optimizer: Strong

AF: One shot

Metering: Spot metering

Drive mode: Single

Ring flash + 100mm Sigma macro lens.

Information

ISO Speed: Determines how sensitive the image sensor is to light.

100-200: Outside, sunny conditions.

400- 800: Outside, dark, evening time, no flash.

1600+: Night time, low light, no flash.

Higher the ISO the grainier the photo.

Shutter speed: Measurement of the time the shutter is open.

Fast shutter speeds: freezes motion.

Slow shutter speeds: Motion.

Aperture: Isolates subject from the background, AKA: narrowing the depth of field, controls brightness.

Small f-stop – Larger opening- more light entering camera- ISOLATES

Large f-stop – Smaller opening – Less light entering camera – BLENDS

Other settings

FULL FACE:

- ISO 200
- Shutter speed 1/200
- **f-stop f/8.0**

EVERYTHING ELSE:

- ISO 200
- Shutter speed 1/200
- **f-stop f/25**

ISO: 100, 200 or 400 - the lower the number, the less noisy the image, but the more power your flash will need to output. Most modern dSLRs produce images at ISO 200 and 400 that are nearly indistinguishable from those shot at 100.

Shutter speed: 1/250 – as per above, this will nearly eliminate the influence of ambient light on the image. Most modern dSLRs have 1/250 as the highest shutter speed available when shooting with a flash.

Aperture: f/32 – in the mouth at 1:3 magnifications at f/32 (assuming a 100mm lens and APS-C sensor) the depth of field is only 22mm (with 11mm in front and 11mm behind the plane of focus).

Approved Dentistry DSLR settings

Table 2. The 8 Basic Shots Recommended for an Initial Patient Photographic Series (ISO Should Be set at 80 to 200 for all Shots)

Shot	Approximate Magnification	Aperture	Shutter Speed	Point of Focus	Cheek Retractors	Reflected image	Horizontal Midline of the Photo	Vertical Midline of the Photo
Full-Face (Smiling)	1:10	f/5.6-8	1/125-1/160	Eyes	No	No	Patient's Nose	Facial Midline
Profile	1:10	f/5.6-8	1/125-1/160	Eyebrows	No	No	Patent's Nose	Patient's Eyes
Full-Smile	1:2	f/18-29	1/125-1/160	Centrals or laterals	No	No	Occlusal Plane	Facial Midline
Anterior (Retracted)	1:2	f/22-29	1/125-1/160	Centrals or laterals	Yes	No	Occlusal Plane	Anatomic Midline
Right Buccal	1:2	f/22-29	1/125-1/160	Canine or premolars	Yes	Yes/No	Occlusal Plane	Canine of Premolars
Left Buccal	1:2	f/22-29	1/125-1/160	Canine or premolars	Yes	Yes/No	Occlusal Plane	Canine of Premolars
Maxillary Occlusal	1:2	f/22-29	1/125-1/160	Premolars	Yes	Yes	Canine or Premolars	Anatomic Midline
Mandibular Occlusal	1:2	f/22-29	1/125-1/160	Premolars	Yes	Yes	Canine or Premolars	Anatomic Midline

Helpful DSLR graphic chart to show the effects of different settings:

