

Back to Basics: which is the best camera for dental photography?

Which is the best camera for dental photography is a question that still remains unanswered for millions of dentists world-wide. This particular blog aims to reduce the confusion amongst the minds of the dentists and help them choose a camera for dental photography.

Let's begin with what we should expect from an Ideal camera for dental photography...

Listed below are the expectations from an ideal camera for dental photography and on the right hand side a few popular camera types. For every point on the left marks have been given under each camera type on a scale of 1 to 5 depending upon how much they hold true to that particular point.

| Expectations from a camera for dental photography | DSLR Camera | Bridge Camera | Compact & Sub Compact Camera | Mobile phone camera |
|--|-------------|---------------|------------------------------|---------------------|
| Ease of use | 3 | 3 | 4 | 5 |
| Greater options for better images | 5 | 4 | 3 | 2 |
| Light Weight | 4 | 4 | 4 | 5 |
| Rugged and sturdy built | 5 | 4 | 4 | 3 |
| Cost effective | 4 | 4 | 4 | 4 |
| Faithfulness with regard to image reproduction | 5 | 3 | 2 | 2 |
| Avoiding parallax and optical viewfinder | 5 | 1 | 1 | 1 |
| Tillable LCD Display | 5 | 5 | 1 | 1 |
| Better sensor | 5 | 3 | 2 | 1 |
| Consistency in image quality while taking images | 5 | 3 | 2 | 1 |
| Exposure meter accuracy | 5 | 5 | 4 | 3 |
| Noise reduction | 5 | 3 | 2 | 2 |
| Controlling DOF and settings as per required | 5 | 3 | 2 | 1 |
| Ability to record unaltered untampered images | 5 | 4 | - | - |
| Should be capable of giving excellent result with given lens | 3 | 5 | 3 | 2 |
| OR should have lens interchangeability | 5 | 4 | - | - |
| Should provide with good lens / accessory back up | 5 | 3 | 2 | 1 |
| Should be compatible with important external flashes | 5 | 1 | 1 | 1 |
| Should be capable of delivering good print quality | 5 | 3 | 2 | 1 |
| TOTAL | 89 | 65 | 43 | 36 |

It is extremely clear from the figures above that a DSLR camera has no real competition when it comes to serious dental photography.

A bridge camera is not for serious photographers while sub-compact (point and shoot) and mobile phone camera come under least preferred category of usage.

Let me share a note from Wikipedia over here...

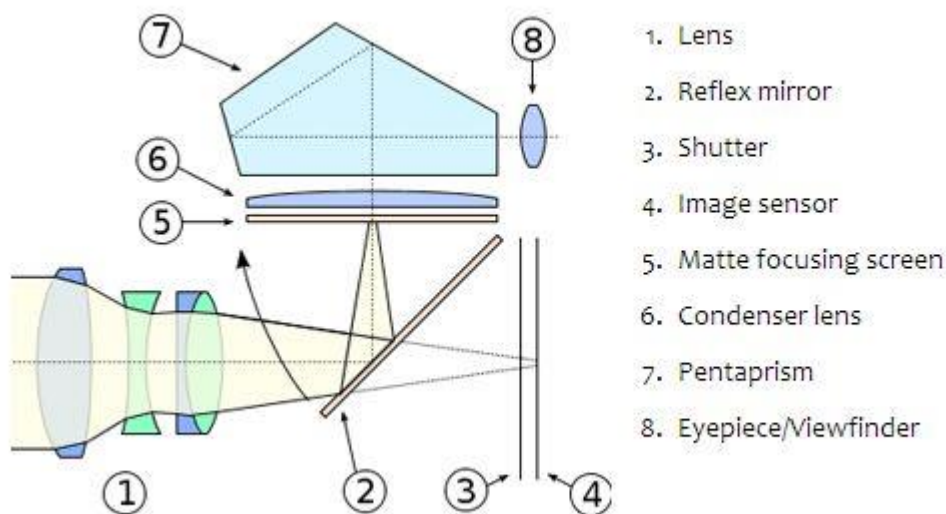
“A point-and-shoot camera is a still camera designed primarily for simple operation. They are popular with people who do not consider themselves photographers but want an easy to use camera for snapshots of vacations, parties, reunions and other events. Point-and-shoot camera sales declined after about 2010 as smartphones overtook them in such uses.”

About DSLR (Digital Single lens reflex) Camera:

DSLR Cameras are increasingly becoming a type of camera that is in the reach of the average photographer as prices fall and as manufacturers develop more user friendly models.

DSLR stands for “Digital Single Lens Reflex”. In simple language, DSLR is a digital camera that uses mirrors to direct light from the lens to the viewfinder, which is a hole on the back of the camera that you look through to see what you are taking a picture of.

Take a look at the following image of an SLR cross section (image courtesy of Wikipedia):



When you look through the viewfinder on the back of the camera, whatever you see is exactly what you are going to get in the photograph. The scene that you are taking a picture of passes through the lens in a form of light into a reflex mirror (#2) that sits at a 45 degree angle inside the camera chamber, which then forwards the light vertically to an optical element called a “pentaprism” (#7). The pentaprism then converts the vertical light to horizontal by redirecting the light through two separate mirrors, right into the viewfinder (#8).

When you take a picture, the reflex mirror (#2) swings upwards, blocking the vertical pathway and letting the light directly through. Then, the shutter (#3) opens up and the light reaches the image sensor (#4). The shutter (#3) remains open for as long as needed for the image sensor (#4) to record

the image, then the shutter (#3) closes and the reflex mirror (#2) drops back to the 45 degree angle to continue redirecting the light into the viewfinder.

Conclusion: If you require a true distortion free image for your dental practise with wide variety of settings and good flash and lens attachment options always insist on a DSLR.