

## What are Orbs?

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A much heated debate in paranormal field surrounds orbs. The debate is around: What are they? Are they spirits? Are they just dust or air particles? Are they bugs? All of the above. Most experts agree the orbs we see in photographs are airborne particles and/or bugs.

A true paranormal orb will be able to be seen with the naked eye. Those types of orbs are believed to be balls of energy. The source of that energy is unknown.

The following information was obtained from Wikipedia:  
Source: [http://en.wikipedia.org/wiki/Orb\\_\(optics\)](http://en.wikipedia.org/wiki/Orb_(optics))



A single orb in the center of the photo, at the person's knee level

The term **orb** describes unexpected, typically circular artifacts that occur in flash photography — sometimes with trails indicating motion — especially common with modern compact and ultra-compact digital cameras.

Orbs are also sometimes called backscatter, orb backscatter, or near-camera reflection.

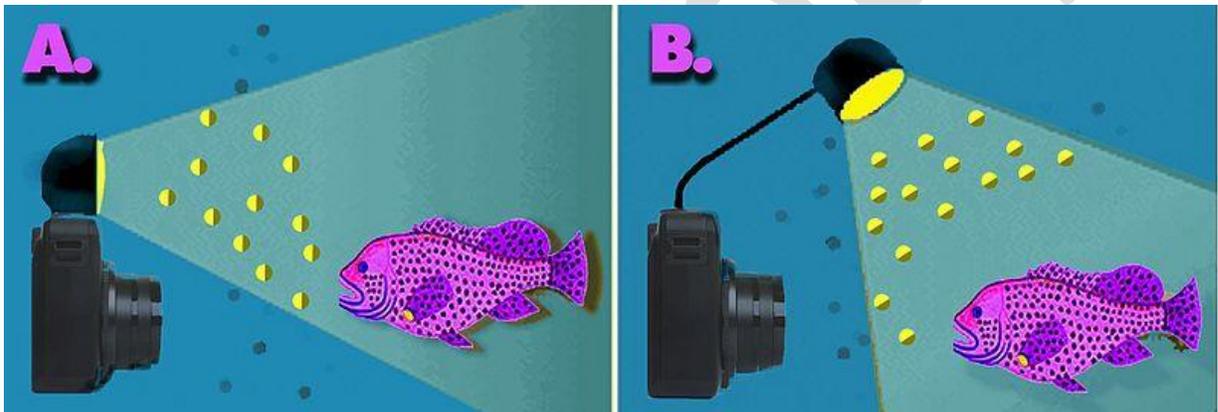
Orb artifacts are captured during low-light instances where the camera's flash is implemented, such as at night or underwater. The artifacts are especially common with compact or ultra-compact cameras, where the short distance between the lens and the built-in flash decreases the angle of light reflection to the lens, *directly* illuminating the aspect of the particles facing the lens and increasing the camera's ability to capture the light reflected off normally sub-visible particles.<sup>[1]</sup>

The orb artifact can result from retroreflection of light off solid particles (e.g., dust, pollen), liquid particles (water droplets, especially rain) or other foreign material within the camera lens.<sup>[1]</sup>

The image artifacts usually appear as either white or semi-transparent circles, though may also occur with whole or partial color spectrums, purple fringing or other chromatic aberration. With rain droplets, an image may capture light passing through the droplet creating a small rainbow effect.

In underwater conditions, particles such as sand or small sea life close to the lens, invisible to the diver, reflect light from the flash causing the orb artifact in the image. A strobe flash, which distances the flash from the lens, eliminates the artifacts.

Below are two diagrams of a hypothetical underwater instance. In Diagram A, the faces of particles directly aligned with the camera's lens are illuminated by the flash, and thus the camera will more likely record orbs. In Diagram B, the faces of particles illuminated by the flash do not face the lens and therefore remain un-recorded.



## References

1. ["The Truth Behind 'Orbs'"](#)