

## How to prevent your camera from taking distorted facial photographs.

It is absolutely imperative that you stand at least 4 feet (or 1.2 meters) away from the patient when taking their facial photographs.

If you stand closer, the facial image will be distorted as demonstrated in the series of photos below.

Photo 1	Photo 2	Photo 3	Photo 4	Photo 5
				
85mm @ 200cm	35mm @ 85cm	16mm @ 40cm	12mm @ 30cm	8mm @ 20cm
6.5 feet away	2.8 feet away	1.3 feet away	1 foot away	8 inches away
NOT distorted	distorted	distorted	distorted	distorted

Photo 1 on the left was taken while standing 6.5 feet (or 200 cm) from the person. The camera zoom was used to zoom in on just the head and neck. This photo reflects how the person truly looks (the photo is NOT distorted).

Photos 2-5 become increasingly distorted as the camera is held increasingly closer to the face. Note how the following facial features are becoming distorted:

1. The ears disappear from view.
2. The eyes appear bigger.
3. The nose appears wider and longer.
4. The shape of the face is becoming narrow and long.

Unfortunately, if you do not have a non-distorted photo like Photo 1 as a reference, it is unlikely you would recognize that Photos 2 and 3 are distorted. The distortion in Photos 4 and 5 is more obvious.

How does this distortion impact measuring the facial features with the software?

1. If the software is used to measure a distorted photo, the lengths of the palpebral fissures will be inaccurately smaller than they truly are. The lip may appear thinner than it truly is. (Although the eyes appear bigger in Photo 5, they measure smaller than they truly are because the  $\frac{3}{4}$  dot, placed between the patient's eyebrows to serve as a ruler in the photo, will also be distorted in size).

**The solution to this problem is simple.**

**DON'T TAKE DISTORTED PHOTOS.**

**ALWAYS STAND AT LEAST 4 FEET AWAY FROM THE PATIENT WHEN TAKING THEIR FACIAL PHOTOGRAPHS.**