

HYPERSTEREO WITH THE

VIEW-MASTER CAMERA



Producing hyperstereos with the View-Master Mark II camera is quite simple once the correct method is learnt. However for the benefit of the newer or uninstructed members of the Society, I should perhaps first explain in simple terms exactly what hyperstereo is all about.

First we must understand what happens when we take a conventional stereo photograph. Most modern stereo cameras have their lens separation set to approximate the separation of our human eyes (approximately 70mm). When the picture is taken, we obtain two pictures from two slightly different viewpoints. This is what our eyes see in normal every day vision, so when we mount our two slightly different views and look at them correctly our brain can put the two views back together again and form a single stereoscopic view. This is fine for close to medium distances, but if you have ever taken a view from high upon a hill looking down upon a town or large city almost at the infinity focus of your camera, I would say that you would have been displeased with the result. The view looks flat and lifeless behind the stereo window. This is because the two lenses on our conventional stereo cameras are too close together to produce the required parallax in the final picture that our brain needs to create an effective stereo result.

The most obvious solution to this problem would be to move the lenses on our camera further apart when taking such views, but unless you are a master engineer this will prove difficult for View-Master camera users! How to get around this problem? The answer is simple, as most views requiring hyperstereo will not include noticeable moving objects, therefore we can use a double (sequential) exposure system.

METHOD: My method is as follows. First select your vantage point, trying not to include foreground objects which would try to "come through" the stereo window and cause viewing discomfort. Next, roughly gauge the distance to the main subject. The general rule when taking hyperstereos is that "THE DISTANCE BETWEEN THE LENSES FOR THE TWO PICTURES SHOULD BE 1/50th OF THE DISTANCE TO THE SUBJECT". For instance, if the subject is at one mile, one mile = 5280 feet, divided by 50 = 106 feet. In fact, the separation at that distance is not very critical and 100 feet would do. However, too great a separation should be avoided in order to prevent too great a difference between the two images, which could cause discomfort in viewing.

Having decided upon the separation distance we next require a black lens cap to blank off one of the lenses. The View-Master Mark II requires 27mm push-on type.

TAKING THE HYPERSTEREO: Choose level ground - a footpath running parallel to the view to be taken is ideal. Next cap the left taking lens. Holding the film wind-on button down, make the first exposure (BE SURE TO HOLD THE WIND-ON BUTTON DOWN UNTIL THE SHUTTER RELEASE BUTTON HAS RETURNED FULLY). Keeping the camera level, swap the lens cap over to the right lens and "side step" 100 feet to the left. Take the second view remembering to let the wind-on button come up as normal.

After a bit of practice, and provided one has grasped the principle, the world of hyperstereo will open up in front of your very eyes! Important points to bear in mind are: Keep the camera at the same height for the two shots. and move only parallel in relation to the subject. N.B. For multiple exposures the film wind-on button can be held down with a large elastic band until the last-but-one exposure required on the same pair of frames.

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