HOW TO MAKE

Water Drop Images

Ed Knepley
Water Drop Images

A Recipe for an

- In-camera,
- No post-processing required,
- Creative technique
to make images like this.
Make attention getting creative images limited only by your imagination. And – for you photo club competitors, a way to stand out from the crowd in your club’s “straight photography” category (if any of those categories still exist today in the kingdom of Lord Adobe).

For another water drop technique - Water drops on a CD

**Ingredients -**

The basic ingredients are as shown in the next image and described below -

1. Horizontal glass surface with space beneath it; you don’t need a large area for the water (glass topped tables work well, or create your own – try picture frame glass sitting on a cardboard box or with a wood table that opens to add a section, open it and place a piece of glass over the opening).
2. Rain-X (for beading the water drops)
3. Water
4. A spray bottle or syringe (to apply water to the glass)
5. DSLR camera (difficult with a point & shoot)
6. Macro Lens (possible with a lens that can focus at short distances for close ups but I’ve not tried this)
7. Tripod (best if it has a pivoting center post as shown above, else you’ll have to put it above your subject on the glass)
8. A hot shoe double bubble level (needed to insure that your camera’s sensor is perfectly parallel to the glass surface)
9. A subject which is placed under the glass; different distances under provide different result options (subject is mesh strainer here, a US flag in initial image, use your imagination)
10. Lighting and/or shades, reflectors, etc. to control lights and especially reflections (in the above ingredient image, these are all the assorted junk around the periphery of the subject which I added to kill window light reflections which were killing me – orange background excluded)
The above setup leads to this image -

Directions -

1. Select a subject and place it under the glass surface. The distance under the glass is a variable you should experiment with (in combination with the height of the camera above the glass). Depending on the distance, your lens, the aperture setting, the focal point, etc. very different images can be made with the same subject. Compare the following image with the one at the top of the post (concentrate on the flag and not the differing water drops from one image to the other). In one vs. the other we see -

- More flag vs. less flag; focused flag vs. soft flag; high contrast vs. soft contrast; etc.
- One constant, however, is that the drops are always in sharp focus – as it should be as they are the Real Subject
- I prefer the top image to this one because the background flag is less distracting and leaves more to the viewer’s imagination (and my wife feels just the opposite) – plus overall the top image’s composition is much better but that’s the subject for another post.
- Experiment
2. Apply Rain-X to the glass surface according to manufacturer's instructions.

3. Apply water to the glass where the Rain-X was applied. How is entirely up to you. If you use a spray bottle, which gives many teeny-tiny drops, the result will be much different from that gotten by using a hypodermic needle which allows you to make the drops any size that you want and to place them exactly where you want them. Using something like the end of a syringe you can also push the drops around, merge two or more into larger drops, or use a paper towel corner to shrink/erase a drop. Much depends on how anal you are. Compare the drops in the following image with those in this post's lead image. For this one, I sprayed 1st and then added more with a hypo. I really don’t care for the ultra-small drops which approach dirt-speck proportions with little or none of the background showing through. Dealer's choice….

4. Set up your camera. It is essential, critical, extremely important (you get the idea…) that the camera is looking straight down on the beaded water drops and its sensor is perfectly parallel to the glass surface. How you accomplish this is up to you (the Ingredient section image shows one way); however you choose to do it – get it done. You will do best, once this is done, to “compose” your image by moving the subject and not the camera (except for vertical camera movement).

5. Lighting – ambient works fine since you’re using a tripod and can handle long exposures with ease. However, if you want to use artificial lights to emphasize certain aspects of the subject – go for it. One thing to be aware of – unwanted reflections can cause problems. Deal with them as needed. If you have many problem windows, shooting at night with artificial lighting is an option to explore.

6. You’re ready to shoot. The only “rule” is to focus precisely on the water drops. If you set up properly (sensor parallel to the glass) you can focus on a single drop and rest assured that they’ll all be in focus. Consider using LiveView if your camera has it. The main shooting variables are -

- Camera distance from the glass
- Subject distance from the glass
- Aperture setting
Examples - all taken with a 105 mm 1:1 macro lens

Keep the same subject but change the background (compare with the strainer plus orange background in the above Ingredients example image). The new background is a group of colored craft pipe cleaners arranged side by side. Note the reflections in the drops that I failed to deal with properly. On the other hand, you may actually want some reflections in the drops – a catch light effect. Again, dealer’s choice....

Remove the “subject”, the strainer in this case, and make the image 100% about the background (as was done with the flag which was both subject and background). I added a few pipe cleaners perpendicular to those in the previous images for added interest.
Move the camera further from the glass and open the aperture so that the subject/background is out of focus (but shown clearly in the drops which should always be in sharp focus).

A flower on a black background. Camera and subject distance from the glass arranged so that the entire flower is visible in each drop but the black background isn’t visible except in the drops.

Aperture set to blur the actual flower so that the image isn’t too busy with a distracting background.
Similar to the above (different flower) but this time only part of the flower appears in the drops and the real flower isn’t as much out of focus (but still not sharp).

Just fooling around. I once did this with my head under the table as a subject – great image for scaring away rodents. You can see that my hand is close to the glass but I threw it out of focus using a very shallow depth of field and left the “story” entirely to the water drops.
Choosing a subject that works well with this technique isn’t always easy. Simple graphic designs work better than busy subjects. Here’s an example of simplicity – I cut the Pepsi logo out of a Pepsi can and placed it fairly close beneath the glass to fill most of the frame – and then let the water beads do the rest.