

Solargraphs

How to create 6 month exposures.

Please have a look at Tarja Trygg's www.solargraphy.com for more examples.

Much of pinhole photography relates to the use of time and being creative with the light from the sun, similar wonders to that found in astronomy. A 6-month exposure will enable you to image the arc of the sun as it rises or sinks throughout 6 months of the year. As well as this you will get some foreground detail and a camera to look at with awe as a small hole etches its 6-month exposure from your window ledge, garden shed, lamp post, tree etc.

Being able to capture a period of time far beyond our own vision is incredible enough, but even more amazing is how simple it is to do. The final camera gives an extreme wide angle of view of 160 degrees.

What you will need:

- An aluminium beer can (or 35mm Film 'pot')
- Black Card
- A Pin
- Black Gaffer Tape
- Cable ties
- Some 5x7 Semi Matt Black and White Photographic paper (easily available online for around £5-00 for 25 sheets)
- 6 months.



Making a light proof lid out of card. (This is covered with black gaffer tape after the photographic paper is inserted)



35mm Film Pot camera. Notice hole cut in plastic tub and final taped up version. A pencil has been taped on the back to point it upwards to catch the height of the summer sun.

- Optional:
- Reflective jacket
- Builders Hard hat
- Stepladder

Assembly

Drink Can

Remove the top off an ALUMINIUM can with a good can opener. (Avoid steel as it leaves a dangerous sharp edge). Tall beer cans are best, as not only do they take untrimmed 5x7 paper, but they also contain beer!

Cut out, using thin black card, a circle 6 cm in diameter and a strip 25cm x 7cm with

notches cut along one edge. Use some gaffer tape to assemble a light proof cap on the end of a can.

Push in and remove a pin half way up the side of the can and move it around to make the hole about 2 mm in diameter (don't worry too much!)

Cover the hole with an insulation tape 'shutter', then place on the light-tight cap.

Film Pot

These contain 35mm film and have the advantage of being far smaller and less conspicuous than the Can cameras.

To keep maximum quality however, you will need to make a smaller hole of around half a mm. The disadvantage is they don't hold beer!

Use the pots with black lids.

Using a craft knife cut a small 1cm square from the side of the plastic pot.

Make a pinhole in a 2cm square piece of aluminium from a drink can and push the end of a pin into the aluminium to make a 1/2 mm sized pinhole (but don't worry too much!).

Use black insulation tape to tape the pinhole onto the outside of the pot then cover the hole with an insulation tape 'shutter'.

Loading photographic paper

In red light (a rear bike light in the bedroom with the light off will be fine), insert a 5x7 sheet of semi matt photographic paper curled round the inside of the can emulsion inwards, (use a 70mm x 45mm piece for the film pot).

Make sure the paper doesn't cover the hole (there should be a 1 cm gap) then replace the cap.

Cover the lid with loads of gaffer tape (to keep out the rain, snow, sleet, lightening, mice etc)

Taking your photo

Find a position pointing towards the Sun. South in the Northern Hemisphere and North in the Southern Hemisphere (I presume!). Google Earth will show you South. A window ledge is ok but choose a nice view if possible and make sure it is well out of reach of enthusiastic street cleaners! It's going to be exposing for some time, day and night.

Chose a date to start the exposure. This winter solstice (2009) is December 21st. Fix the camera sturdily in position. It needs to cope with all that 6 months of natures elements can throw at it. I find a healthy mix of gaffer tape and cable ties works quite well. Gluing a pencil onto the side will help to keep the camera steady if fixed to a circular object such as a lamp post. Glueing one horizontally on the back will tilt the camera upwards slightly enabling the capture the height of the Summer sun.

Peel the shutter (sticker) off, go inside and write on your calendar when you will stop the exposure.

Have a look at it from time to time thinking things like, "I wonder what is going on in there".

After 6 months place the tape shutter onto the hole and bring the camera back home after its long ordeal. (OK, its not exactly the Shackleton expedition I know but by now it probably needs a rest!)

The Clever bit.

1. Switch off the light in your computer room.
2. Set the scanner on a highish resolution (500dpi is good for 5x7, 900 ish for the

film pot)

3. Take the photo paper out of the can camera and ,,,,,,without developing it (Told you it was clever!), place it onto the scanner with a book on top to hold it flat and press scan.
4. Save the negative image on your computer.
5. After scanning, place the undeveloped print into a box entitled 'scanned paper negs'.
6. Open up Photoshop or PaintNet. (Paintnet is entirely free and just as capable of what is required). <http://www.getpaint.net/download.html>.
7. Image > Inverse > Flip horizontal and play around with the contrast and brightness.
8. Show off to your mate in the pub after he has shown you his photos of Teneriffe.

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