

Things The Internet Taught Me That Life Just Didn't

Quick Start Guide

Guide de démarrage rapide

Schnellstart-Referenz

Guida Rapida all'installazione

Guía de inicio rápido

Guia de Início Rápido

Aan de Slag gids



Quick Start Guide

Please read this guide before operating this camera. After you finish reading this guide, store it in a safe place for future reference.

Table of Contents

Installing the Software	4	Shooting Your First Image	28
Disassembling the Scanner	5	Making a Ground Glass	31
Constructing the Pinhole	9	Constructing a Wooden Frame	34
Assembling the Camera	11	Constructing the Bellow	39
Shooting Your First Image	13	Assembling the Camera	42
Constructing the Lens	16	Shooting Your First Image	46
Constructing the Bellow	23	Specifications	49
Assembling the Camera	25		

Bill Of Materials

CanoScan 4400F	Black Spraypaint Matte
Canon AC Adapter K30278	Ruler
USB A to USB B Cable	Aluminum Foil
Cardboard Boxes	Needle
Gaffergear Dance Floor Tape Black	Magnifying Glass
Spaghetti Measure	Wood
PVC Pipe	Screwdriver
Figure Saw	Stapler Gun
Screws	

VueScan for Mac OS X - Getting Started

This tutorial is going to show you how to install VueScan on Mac OS X, and show you how to scan your first document with VueScan.

The VueScan installation file that you just downloaded should be in your downloads folder, which in most cases can be accessed in the dock in the lower right hand corner of the screen, or you can access the installation file from the downloads section of the browser you are using. Either way, **click on the VueScan installation file to continue the installation.** After the VueScan disk image appears, either **double click on the VueScan icon,** **or drag the VueScan icon to the applications folder,** to continue the installation. I'm going to double click the VueScan icon.



This is going to show a warning dialog, like all other applications you've download from the internet. **Press open to continue the installation process.**



When you first open VueScan it will show a tip of the day. Press 'Close' to close the tip of the day and start VueScan



Make sure you have your **scanner plugged in and turned on before you open VueScan.** If you don't have it turned on before you start, restart VueScan once you have it turned on.

I'm going to show you how to scan a document using a flatbed scanner. You might have a different type of scanner like a film scanner or a scanner with an automatic document feeder. The process will be similar on those scanners, but slightly different.

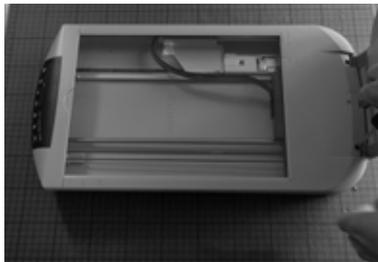
Put a document on to the flatbed of the scanner. Then press the 'Scan' button in VueScan. It will then take a few seconds to scan your document.

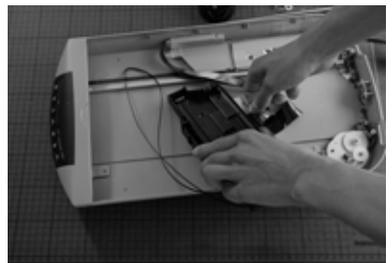
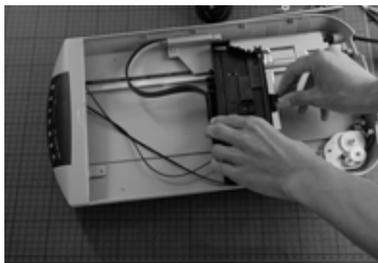
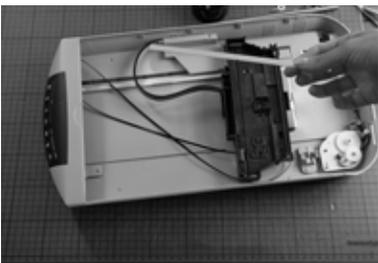
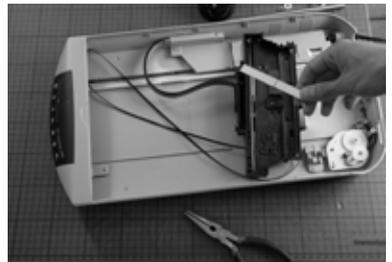
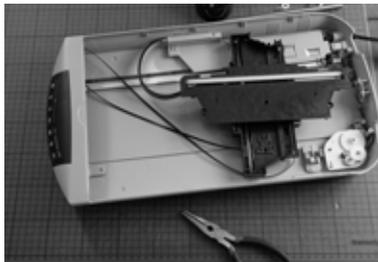
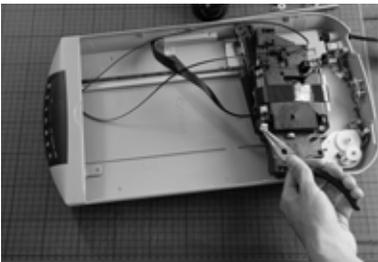
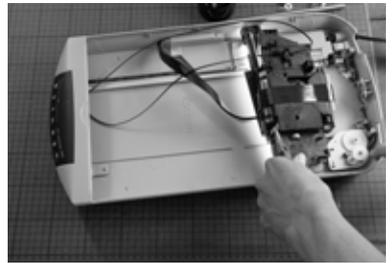
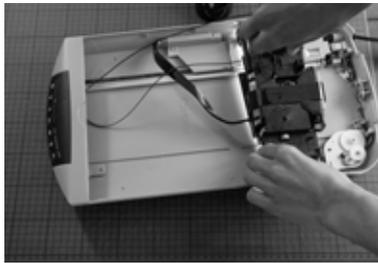
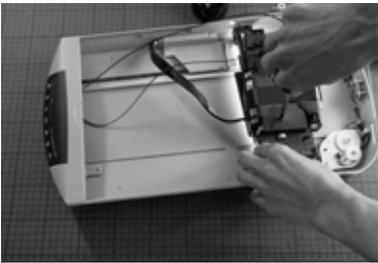
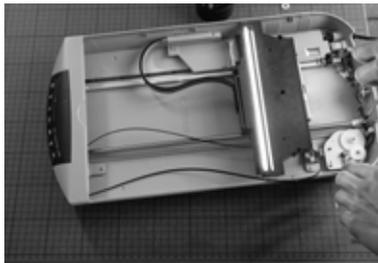
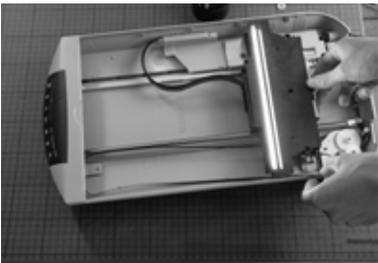
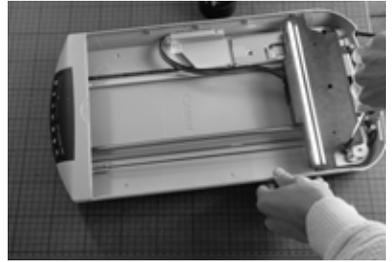
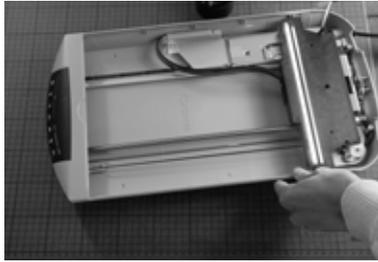
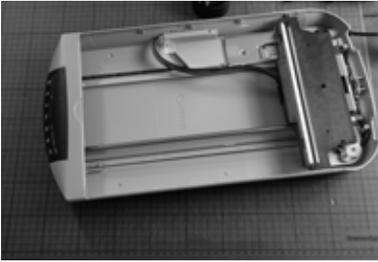
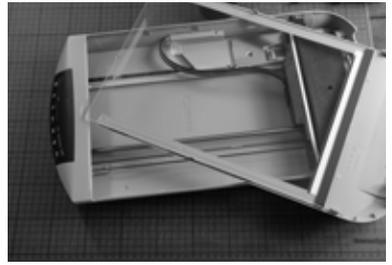
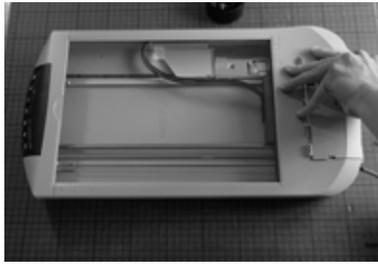


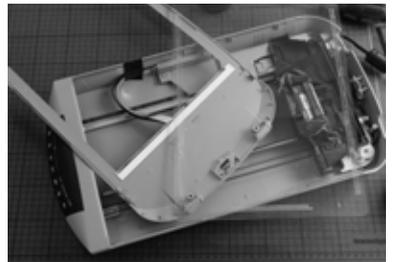
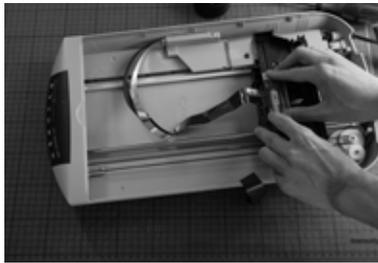
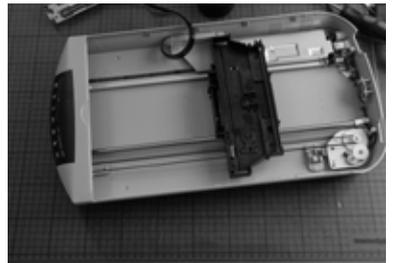
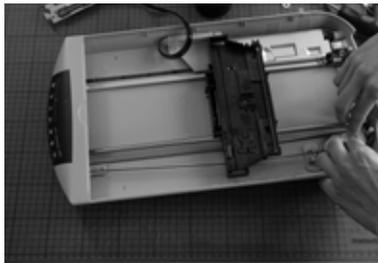
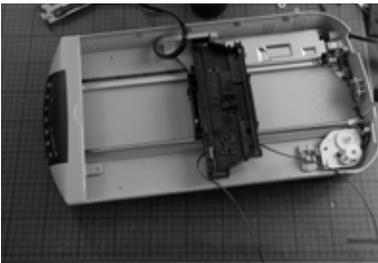
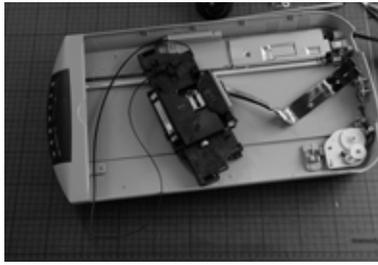
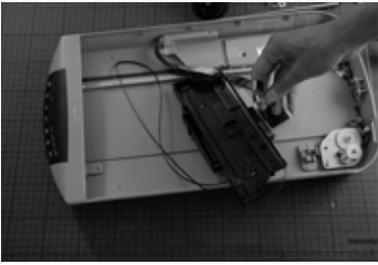
Once you are done scanning a multipage document, press the last page button at the bottom to indicate that you have scanned the last page of this document and you are ready to save the document.



Disassembling the Scanner









How to Make a Shoebox Pinhole Camera : Photography Effects & Techniques

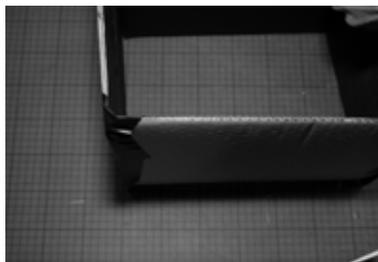
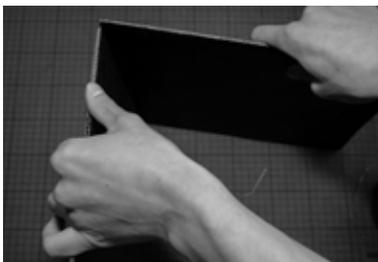
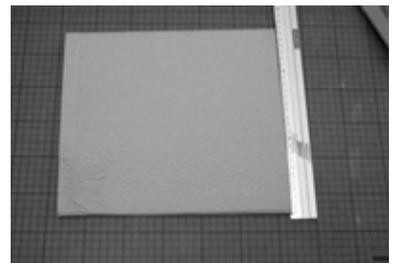
Hi, I'm Dan Reinecke with unknown media and today I'm going to show you how to make a shoebox pinhole camera.

First what you're going to do is **spray paint the entire box and the lid with flat black spray paint.**

After that you're going to **put a hole in the box that's about 1/75 of an inch.** Be sure it's a smooth hole. If it isn't, the photos will not come out correctly. *Cover the hole with black tape.* This will be your camera's shutter.

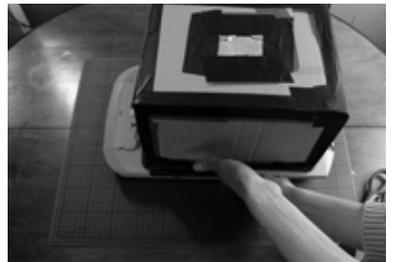
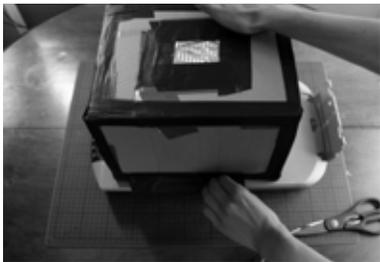
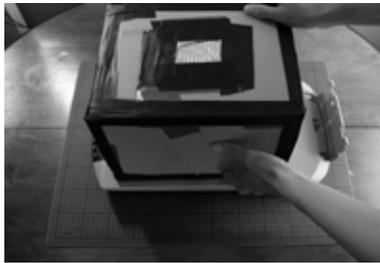
Next, in a pitch black room, tape your photo paper to the inside of the box. Your camera is now loaded and ready to shoot. **Stand about 10 feet away from your subject and remove the tape covering the hole.** Try exposing the photo paper for around 20 seconds at first, it will take a few tries to figure out the correct exposure time. But once you have it down, you'll be sure to take some amazing pinhole camera photos.

I'm Dan Reinecke take your best shot.





Assembling the Camera





Shooting Your First Image

Getting Started

So you build a 'Pinhole Scanner Camera'? How exciting!

But how do we operate our new camera? I'm going to guide you through the first steps.

We'll start by photographing a 'Vase With Flowers' to get a grasp of the colours, lens distortion, composition, quality and texture of our new camera.



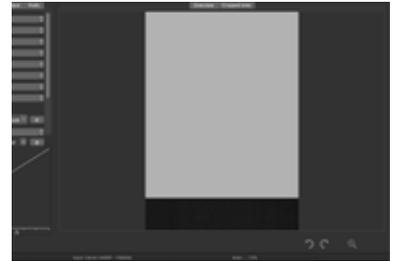
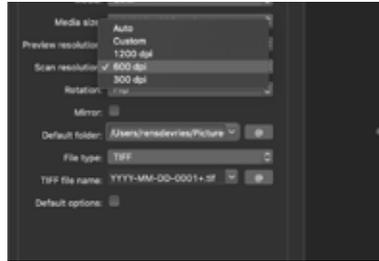
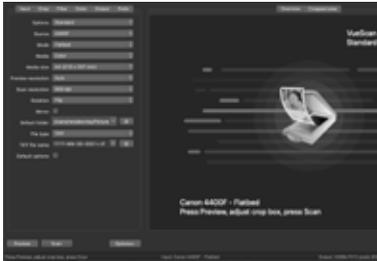
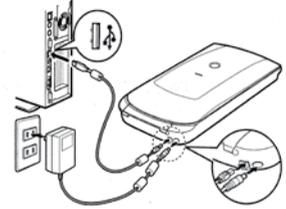
[camera] Canon EOS 70D
[aperture] f/7.1
[iso] 100
[shutter speed] 1/250
[focal length] 26 mm

Using Vuescan

Hook your CanoScan 4400F up to your device and a power outlet as seen on the image to the left.

Your **'Shutter Speed'** can be slightly controlled with the VueScan **'Scan Resolution'** function. With this particular image I chose to use **'600 DPI'**

Press **'Scan'** and an image will start to appear.



Composing Your Image

We are working with a **'fixed aperture'**, my pinhole is **2 millimetres**, and this works well with a bright sunny day. In this particular example the camera is at **340 centimetres** distance from the subject

We can't see what our camera is perceiving, composing our image is process of trial and error. To speed up this process, go to **'Scan Resolution'** and set this to **the lowest setting**.





Building a Large Format Lens With Magnifying Glass and Spaghetti Measure

We got what we need to assemble a lens here. You got the barrel which is a piece of schedule 40 PVC with the lens which came from a 50 cent magnifying glass with the frame taken off of it. You get this cute little spaghetti measure goes from four servings, three, two and one. So that's the iris for it. **A little black paint on that** and call it good.

To keep the lens in place. I **hot glued some zip tie around the edge of the inside of the end of the barrel** here. I've also **flocked it with flocking paper**. Now the lens will fit right in there fairly snug, and then still **put something on the end to keep it in place**. On the inside. But that's kind of what I'm looking for.

Next step would be to fasten those on there somehow. Then what fastened to a lens board. My lens board was not a tight fit. So I **set the lens board in the lens simply on a piece of silicone and put a thick layer of hot glue around the edge to hold it in place**.

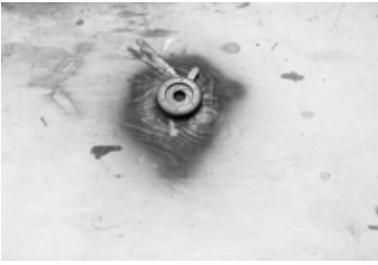
I **Put a little flocking around the back of that to keep it light tight**, and then call it good.













Making Bellows - Template And Tape Method

Hi. So we've made bellows before, actually, we've made the museum Venetian blind. And then we've made those really large bellows that we run our air conditioning unit with. But there's plenty of reasons that you can, you would want actually to make bellows that have a whole variety of sizes, because bellows are just tremendously useful.

And if you want to make them at a variety of sizes, and really, you need a different methodology to do it. So this one is **based on a template**. Now I've been using a template to make bellows this kind of size from this material. This is a fabric tape, it's fabric covered in PVC. And when you make your final bellows out of it, it's actually quite springy and feels like leather. And it's a very durable, airtight and light tight bellows, so amazingly useful, and I wanted to share it with you. Now **the first thing you need to do is draw up a template** and your template needs to look something like this.

Now obviously **I drew that on the computer**. And that means that that template is now saved forever. And I'll be able to produce as many bellows as that's canvas size, as I want to just **by printing off my template**. When I print off my template and I have a piece of card **This is 230 GSM**, is what goes through my printer, piece of card that looks like that. And when you saw the template, what you saw is a whole set of tram lines where they were **eight millimeters apart with a two millimeter gap**. **And then I divided the page up into four and did some 45 degree angles**, and it's all on one piece of paper, which is going to hold everything together. Because **the next thing you need to do is take yourself a steel ruler, and draw down those lines with a sharp knife**. But let's have a close up of me doing that. **So once you get your template printed out, take your knife, line up the ruler and draw the sharp knife down the tram lines. And continue with that all the way up the page. And when you've done that, just nick the edges of the tram line and lift it out.**

And again, go down the whole page doing that. So when you've done that **you get this kind of a grid pattern**. Now what you do is **take your tape and put it onto there leaving the zigzags clear** and don't worry about using too much tape. This is part of what registers it and obviously we do that one two three four times. Now we've done that we can go down cutting out the zigzags. Just **draw your knife through and you'll put out a little zigzag pattern all the way down**. Each time you do one you need to tip it over and then do the next and the next. That's it with a zigzag cut out. **So now what I want to do is tape over that before I do the next one. And the tape needs to overlap**. And then we do the others because we haven't done the end pieces because those, the end pieces are linked to lock but once you've done that, we can **line up the two bits of card there and slice through the tape, and turn it over. Now we need to tape this side**. Okay, and that's what you end up with. Now we need to **join this edge to this edge**. And the easiest way I found to do that is to find yourself a block, pop that down and then tape down there to hold that in place.

And then we can **bring that bit round, line it up, tape down there to hold it in place. And then we can put the fixing tape on and remove two tapes that are being used to help hold everything**. So they're things held in place and lined up so that when they get that bit of tape on there, like that, and here's the bit of tape, and then **we can remove the holding tape**. Now we need to **feed a bit of tape down there and finish that off**. So that makes a tube. Now this could be the magical bit I quite like this bit actually, I usually **choose the thinner lines and push the thinner lines in that is there's the shorter ones here where the trapezium were, and the longer ones out and you give a little nudge to the corner there and it'll start to fold up** and it's a bit like origami, once it gets going. It's just folds all by itself.

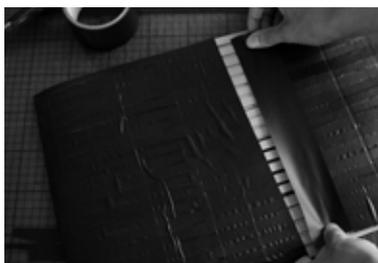
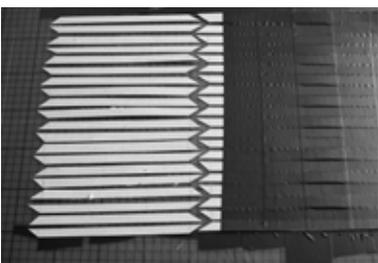
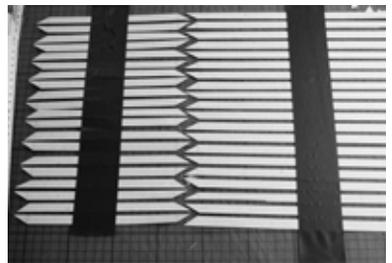
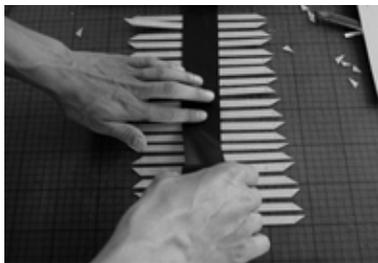
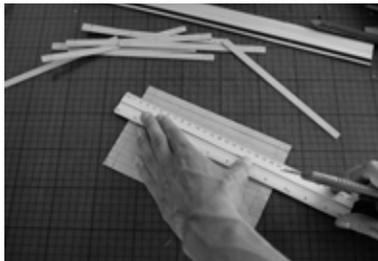
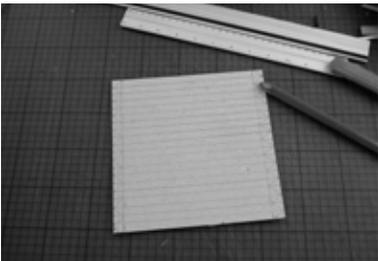
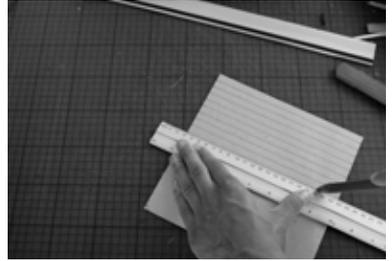
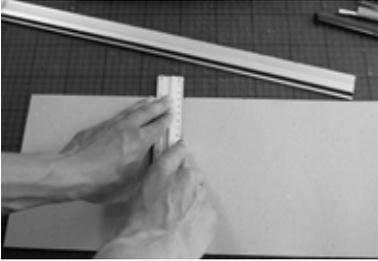
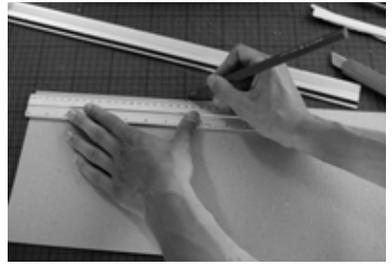
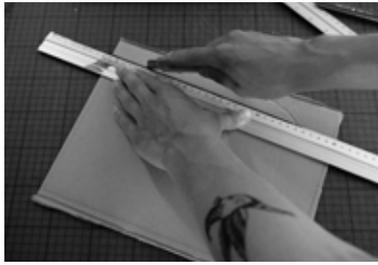
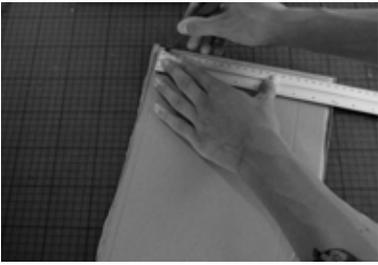
So we've done that we need to finish them off and finish them off. You just put a couple of blocks one with a hole in it, one without a hole in it. Now these are 6.6 centimeters because that's what fits the bellows that I've made. And as you can see I've stuffed one in and I've put a little bit of decorative copper on it because I like copper. Now this just fits in there like that. And it's a little tight and a little fiddly, but you will get it to fit. Once you've got it to fit, you need to go around it with this white tape. This is a PVC electricians tape that has stretch. If you go around that with some tape, it will stretch out but pull back in again. Then what I do is I put a bit of something decorative and these are just brass tacks they are furniture tax actually, and that holds everything together. And that will then be your finished bellows.

So I'm going to put that in there and then tape it up. So that's it with this electricians tape wrapped around a couple of times pulling everything tight. This bit soldered over the top, I'll actually trim off. So I'll put the copper around it now for decoration, put the pins in and then trim that one off to make it neat. They won't bother doing anything with the surface here because this is the surface is going to get fixed to whatever it is I want to fix it on. That one, I've printed up a little bit of copper because that one will be on show.

And there it is finished. Anyway, I thought I'd share that with you because it's a nice way of making a bellows any size you want. I made that really loud bellows actually from Venetian blind, but I also made another one in this skirt and that larger scale from this. If you're using something really large, obviously you're gonna have to draw that template by hand. But if you want quite small bellows even smaller than this, then doing it on the computer and saving that will give you a template so you can do as many as you like. But that's the bellows finished.

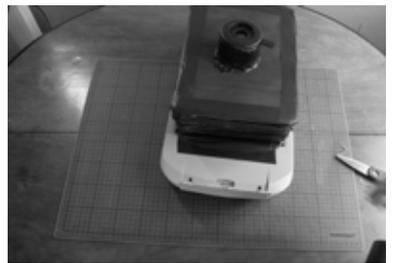
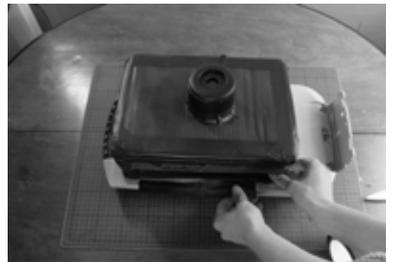
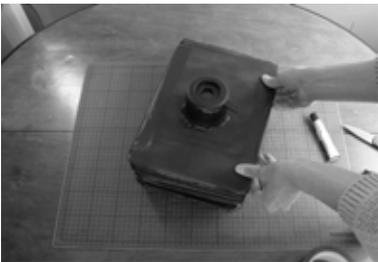
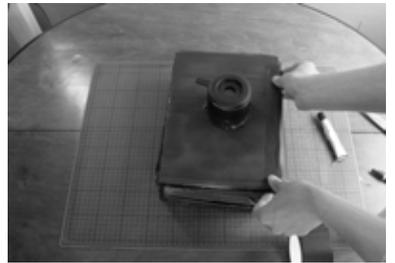
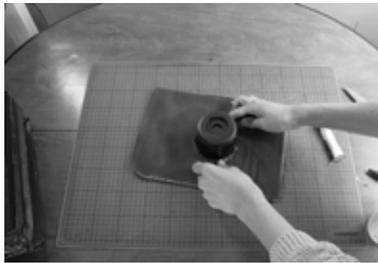
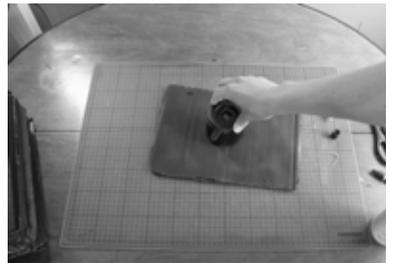
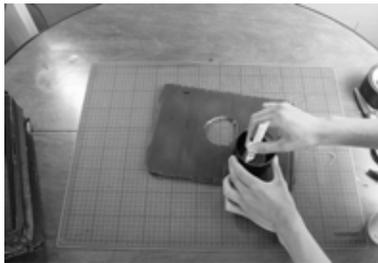
And I hope you enjoyed the video and thank you very much for watching.





Assembling the Camera







Shooting Your First Image

Getting Started

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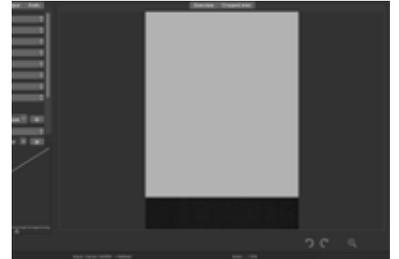
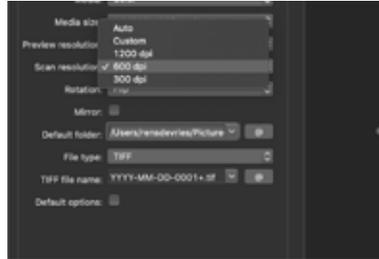
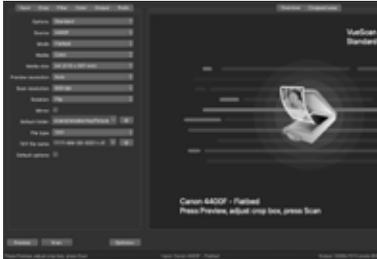
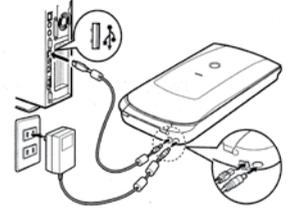
[camera] Canon EOS 70D
[aperture] f/7.1
[iso] 100
[shutter speed] 1/250
[focal length] 26 mm

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Your **'Shutter Speed'** can be slightly controlled with the VueScan **'Scan Resolution'** function. With this particular image I chose to use **'600 DPI'**

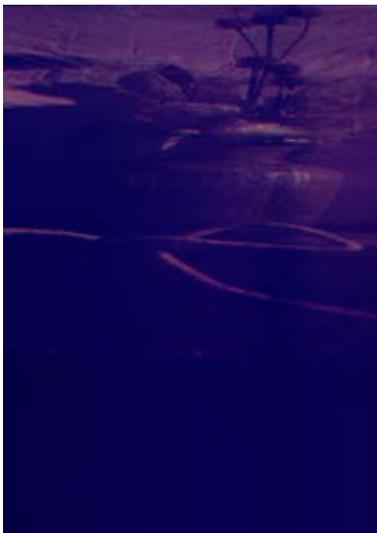
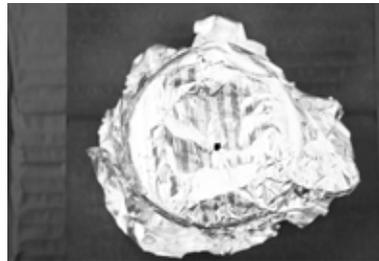
Press **'Scan'** and an image will start to appear.



Composing Your Image

We are working with a **'fixed aperture'**, the lens we've made doesn't work in a sunny environment. **Attach something in front of the lens with a hole of 2 millimetres.** In this particular example the camera is at 340 centimetres distance from the subject

We can't see what our camera is perceiving, composing our image is process of trial an error. To speed up this process, go to **'Scan Resolution'** and set this to **the lowest setting.**





Making a Ground Glass for a View Camera - It's Easy!

Hi, my name is Tony Santo and I'm a large format photographer. In this video, I'm going to show you how to make your own ground glass. So I'm at Petrified Forest National Park last year. And I just finished taking a picture of this beautiful coloured petrified log. And I move the tripod over to the side near my bag, so I could start breaking down my gear and putting it away. And next thing you know, I turned my back on my tripod. And I hear a loud crash. And I hear glass breaking. So this is my actual ground glass from last year that ended up breaking. And as you can see there was just enough of it where I could actually use it in the field to move around in the viewfinder a little bit to compose my image. And that was a little problematic because I was only a couple days into about a four day trip, I was moving on to the Grand Canyon that day. So that was a lot of fun. So anyhow, thankfully, the ground glass is the only thing that broke and I didn't break my vernaille for now, but for now is made of acrylic, and it's got these concentric circles that brighten the screen. So this is very, very expensive. And it's an important piece of this whole system because it does disperse the light evenly across the ground glass. So it makes focusing really easy.

So in this video, what we're working on is the ground glass, I'm going to show you how to make that and this particular replacement that I made on the frosted side, on the side that you grind down with the silicone carbide, I've actually **drawn some hash marks to denote where my six by seven film holder lines up** with. So you can draw anything you want. on here, you could put you know, a hash mark in the center or some horizontal lines and vertical lines, whatever you need, once you've made the ground glass, it's yours to basically customise however you like. So there are just a few things that you're going to need to make your own ground glass. The first thing which is a piece of glass, there's nothing special about this glass. It's the kind of glass that you would find in an ordinary picture frame. **So what I decided to do is to make a cardboard cutout of the area that I needed for my ground glass** from the camera that you see over to my right, and I took it down to my home improvement store. And they were able to cut two pieces of glass for me for the size that I needed. And the nice thing about having someone do it for you is that they have the right tools. And you get these nice clean edges all around the glass.

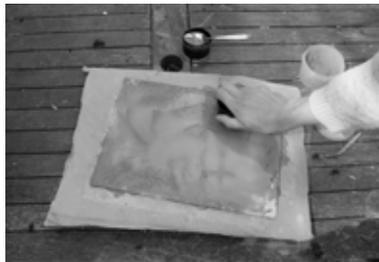
The next thing you're going to need is silicon carbide also known as carborundum powder. This is a 600 grit, I purchased it in a one pound container. It is certainly way more powder than I'm ever going to use. Assuming that I don't break too many ground glasses.

The next thing that I would recommend doing is making yourself a tool so that you can control the grinding of the glass. And what I did here was I took a scrap piece of glass, a scrap piece of wood and I used double sided tape to fix them together. In this way, when I'm grinding glass, I have more control over the areas that I'm trying to get. And the last thing that I would recommend is a piece of cardboard that you use to set your glass onto while you're actually grinding down the glass, it does a really nice job I have found to hold the glass in place and stop it from sliding all around.

Okay, so **I'm going to begin by putting a little powder on the ground glass.** And you want to try and be careful enough to not get this up into the atmosphere because it is a fine powder. And you don't want to be breathing it in because that can lead to some respiratory issues for you down the road if you inhale enough of this stuff.

Next thing I'm going to do, I'm just going to take a little turkey baster here and pour some water right over the powder doesn't take too much. And I'm going to try to spread this out a little bit just to make it easier to grind glass. And I'm simply just kind of pressed down and start grinding. **Just some firm pressure is all you need to try to hit all areas of the glass** you can really hear that silicon carbide cutting into the glass as you're doing this. I'll keep doing this for a while.

Okay, so now **I'm just going to wipe this clean in the sink and see how we've done so far.** So I've gone ahead and washed off all the silicone carbide residue, and **I've also dried my ground glass.** And that's an important point to remember because if you don't dry the ground glass, you're not actually going to see the effect that all that grinding that you just did had on the glass. Now as you can see from this particular example that I just did, I've missed a few spots in this area here. So I need to go back now and apply some fresh silicone carbide to the glass, a little bit of water and maybe five minutes or so of grinding and this should be a fantastic ground glass ready for use. So after about five additional minutes of grinding with the silicone carbide, my ground glass looks fantastic and it's ready for a test trial. So let's go ahead and do that. Now that's a fully functional ground glass for a fraction of the cost. Thanks for watching this video. I hope you found it useful.





My DIY 8x10 Wet Plate Camera

I had been mesmerised by wet plate photography for at least a couple years. It wasn't until I saw a post by Giles Clement about making a camera in 10 hours with his friends that I felt inspired to not only learn more, but maybe attempt building my own camera. I did some other research into other DIY cameras and after that I was convinced I would be able to do it.

I thought I would take the same approach Giles did, use standard size pieces of poplar from Home Depot. I figured this way, there would be less cutting (especially ripping) with my limited set of tools. The only tools I had on hand were a jigsaw, an electric sander, a cheap 12v drill, a file, a very long ruler, a tape measure and my two hands. I also had an mini assistant as seen below. Before I started building the camera, I **spent a day or so designing it in a program called Sketch**. I decided to use this program because I'm familiar with it since I use it at work (I design apps you would find on the web or on your phone), plus it's super intuitive. It's meant for user interface design, so you can only design 2D, but I figured I would just design each part from multiple angles. So, that's what I did and it seemed to work pretty well. I'm so glad I spent the time coming up with a design and having all the measurements down, it made the whole process go smoothly and quickly. It's was definitely worth the upfront investment in time.

Once I had the design down, I decided I would start with the rear standard. I figured this was the easiest part to build. If I couldn't build that, I knew I wouldn't be able to build the rest of it. I took off to Home Depot to pick up the pieces of wood. This part was easy because I had all the measurement down from the design plans I laid out earlier. I made my way back home, **cut up all the pieces to size using a jigsaw and began putting it together**. Essentially I was just making a box. A couple hours later I had the start to the rear standard. I knew at this point it was totally possible.

Next was the front standard. The only tricky part here was getting a nice round circle right in the middle of the front board for the lens to go into. I end up buying one of those compass circle drawing tools that you would use in elementary school. That seemed to do trick.

After that was complete, next was the ground glass holder. This took me a bit of time to wrap my head around. When I was initially coming up with the design for the camera, I was planning on using a standard film holder. I couldn't come up with a way to have the ground glass perfectly on the same plane as the film. It was at that point I decided I would not only make my own ground glass holder, but my own film/paper/plate holder as well. This way I could control everything. Since everything had to line up perfectly at the correct depth, I figured the easiest way to make this happen would be to **use layers of 0.25" thick pieces of MDF. I also bought a 0.25" thick piece of glass, which I ground down with silicon carbide. After 45 minutes of grinding and then putting it all together, I had my ground glass holder.**

Next, the film/plate holder. **I cut and ensembles five slightly differently shaped layers of MDF. I then glued them all together and clamped them down.**

For the lens, I bought a 300mm Fujinon f5.6, a good cheap starting point. Plus it came with a copal shutter, so I figured that would make life a little easier for shooting higher ISO mediums such as film. **I bolted it straight to the front standard with some metal plates and screws** I got at Home Depot. I needed a way to attach the standards together and be able to focus. I went the simple route that Giles went with, a simple long frame to allow the front and back standard easily slide back and forth. The frame was easy enough to put together. **I added a bit of paraffin wax on the outside rails** to help the standards slide easily. **I then added a couple feet on each standard and attached it to the optical stand.** I could really see my camera coming to life now.

I almost had my camera, minus the bellows. My original idea was to do a box inside a box type bellows. Kind of like a telescope, but with only two pieces. I wasn't really planning on spending much time on it, but I quickly realized that it wasn't going to be able to focus at 1:1 or infinity, but somewhere in between. This wasn't ideal. I tried looking into other options, knowing that building a real bellows is a huge undertaking. I couldn't find any decent options. I thought to myself, this can't be that hard, it will just take time. **So I opened up Sketch again and started designing it.** I was now committed to making a real bellows.

This bellows was going to be fairly large (over 3' long) and **require paper stiffeners and two layers of 100% opaque material.** I decided I would **create a smaller (6" long) paper prototype** before jumping straight into the full version. **I cut up some stock paper, folded it up, taped it together** and voilà, a prototype.

My measurements were spot on. I was good to go in terms of building out the real version. I went down to a local textiles store and looked at some leather. I managed to find a very thin synthetic leather that was completely opaque. I made sure it was by shining a very bright LED light right up against it. **I spent the next evening drawing out the bellows' stiffeners on big pieces of Bristol board I got from the local dollar store.** The next day my wife and I spent a good 3 to 4 hours cutting, scoring and folding each line. This was probably the most tedious part of making the camera — It's also the only point which I enlisted some help. **I used cement glue to fasten the stiffeners to the big piece of the leather I bought. I added another piece of leather to the inside.**

Next, **I folded it all down.** It took a huge amount of effort, but I had my bellows. Standing in my carport at about 11pm at night, **I used the last bit of cement glue I had and attached the bellows to the front and rear standards.** My camera was complete!! I had no idea if it would even work, but I was excited to try it out.

I woke in the morning just as the sun beginning to rise and ran outside to finally try out my camera. I looked through the back of the camera and there it was, a beautiful upside down and backwards image on the ground glass. I was actually shocked that it worked and that it looked as amazing as it did. I was excited before, but now I was super stoked to start taking photos with it but I didn't know if it was light tight, or even going to work at all.

I set my camera up on a bench outside, as I didn't have a tripod yet. My wife sat down on another bench. I moved the camera close to her and got the composition down. I slowly moved the rear standard to bring her face into focus. A quick trip to the garage (which is my darkroom) I loaded up a paper negative into my holder — came back out, swapped the ground glass for the holder and open the shutter. Think I counted to about 5 seconds while my wife sat there as still as she could. The paper was exposed... but did it actually work?

We headed into the garage. I unloaded the paper from the holder and dropped it into the developer. An image began to appear... I could tell it worked! Next was the stop bath and the fixer. I brought the image outside so we could see it better. Hour and hours of designing, cutting, sanding, screwing, folding, composing and focusing, I had my first image.

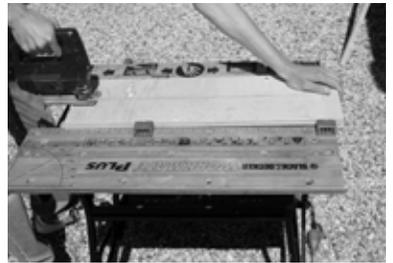
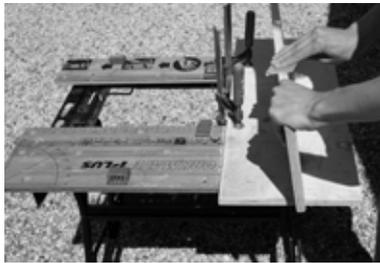
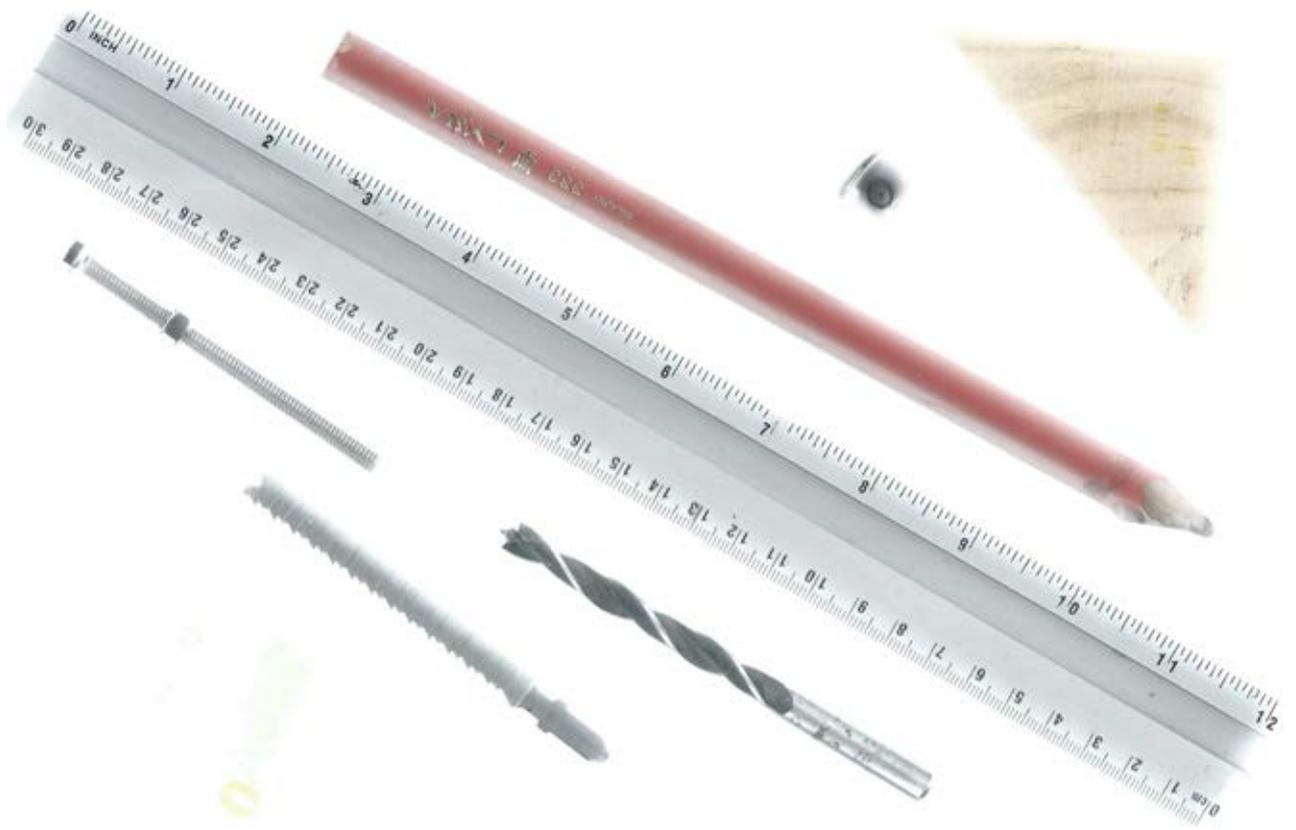
Since that day, I've taken a workshop with Quinn Jacobson and learned how to mix my own chemicals and shoot wet plate. I've taken probably 20–30 tintypes and ambrotypes. I've also shot some x-ray film. I also built a 4x5 downsizing back and another holder just for wet plate. I did some modifications to the front standard so I can use lens boards, therefore more lenses! I bought a 16" f4 Charles Shepherd Petzval which I had a custom flange made to be able to mount it to the camera properly.

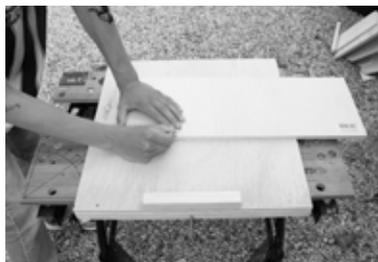
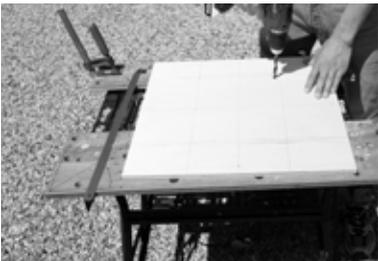
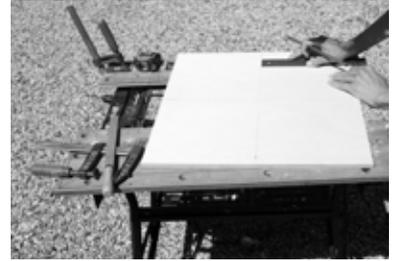
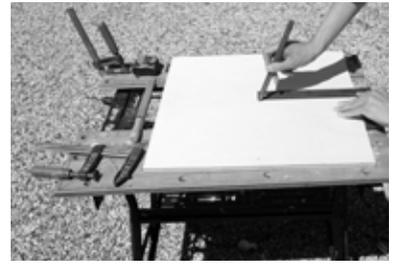
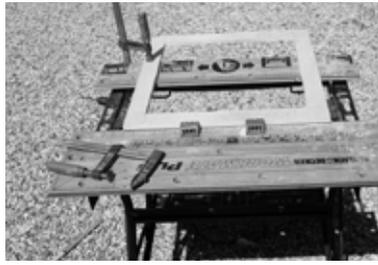
Here are some plates I've taken with the camera so far.

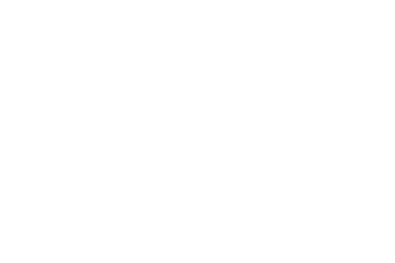
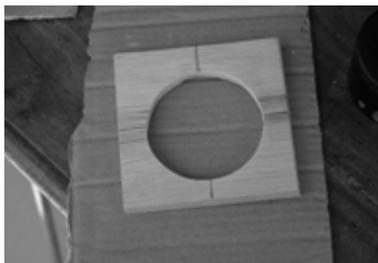
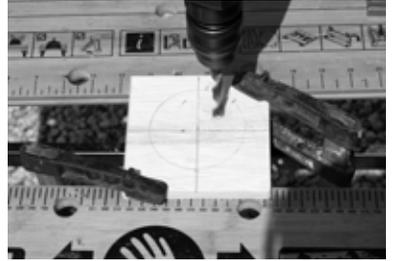
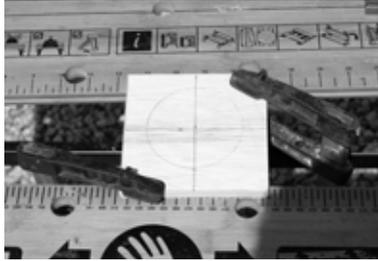
It's funny doing a project like this—as soon as you've finished it, instantly you know how you would do things differently the next time. I already have a 8x10 V2 in my head and I've also started another camera... a much larger camera. I can tell you about that some other time though.

I was thinking of releasing the plans for the camera.

If you are interested, leave me a note in the comments below.







Camera bellows

A few images of my bellows construction

I made some simple calculations [Guesstimating involved] then I made this simple paper template.
(I will add a proper pattern with measurements later)

Under construction!

First I used the template to mark and cut out a sheet of dark cloth (White on the inside, used for home cinemas etc il found it at the local fabric shop) **then I taped it on a fiberboard to keep it flat and wrinkle free.**

Then I used masking tape mounted upside down on the darkcloth 2 stripes/side of the cone.
This helped me to hold the stiffener strips in place while I organized them.

Stiffeners was fabricated with a paper cutter and was made of cheap cardboard document binders.

When all stripes was organized and lined up, they was glued in place with contact adhesive I used a small paint roller to spread it evenly. The tape was left on all the way in to the final construction.

This is how it looks when all the stiffeners are glued in place

Next step (Not shown here) was to glue another sheet of thin flat black fabric(the inner liner) to cover the stiffeners and sandwich them between the dark cloth and the inner liner.

I used black cotton aimed for bed sheets as it was the cheapest :0)

Also notice the overlapping edge to the right, that are used to close the bellows tube so that it becomes light proof.

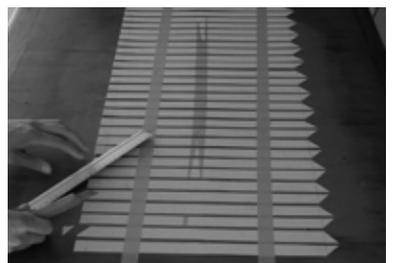
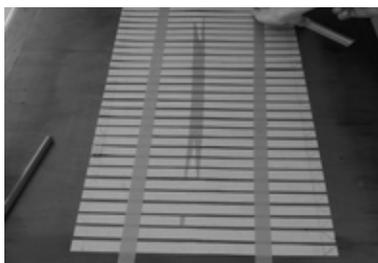
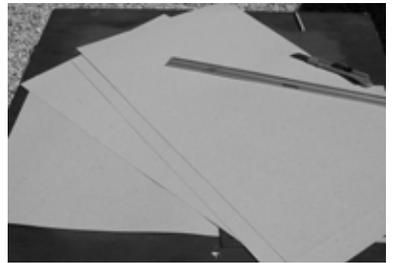
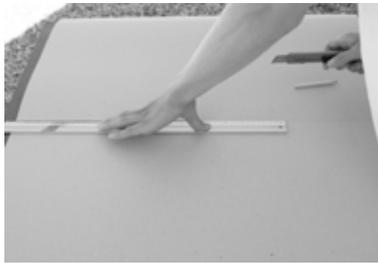
This is the paper cone that I made to make it easier to glue the bellows together, it helps me to get a straight, not twisted bellows. The same cone can also act as a help to keep everything straight while folding the bellows.

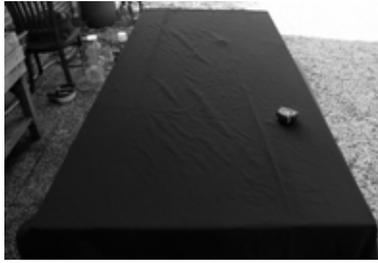
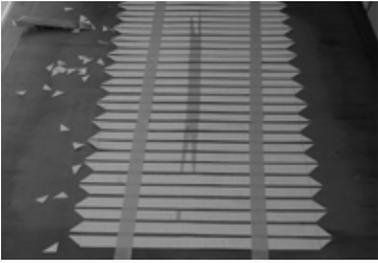
More details about how to fold can be found if you browse thru the bellows links at the bottom of this page.

The result!

Foot print of the bellows is about 260x350mm.

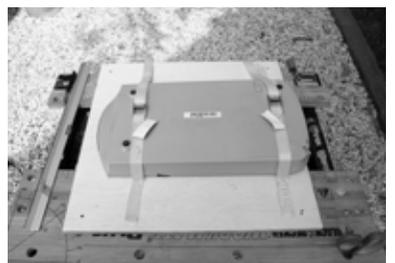
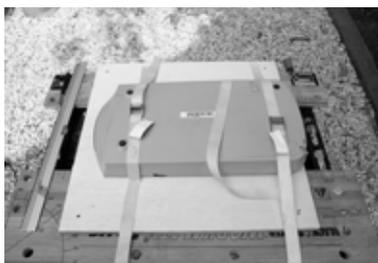
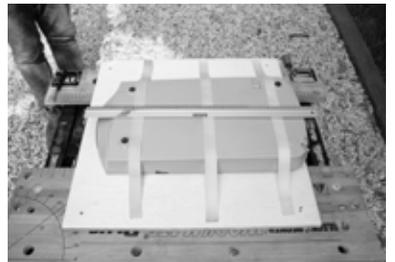
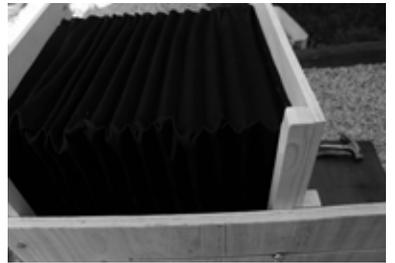
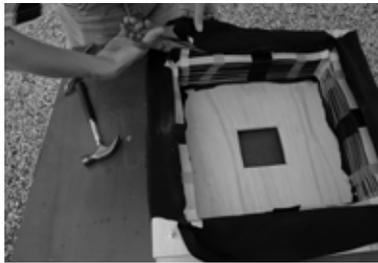
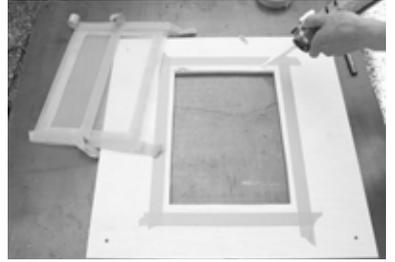
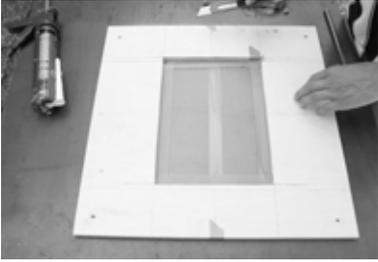
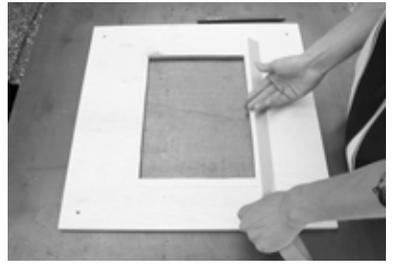
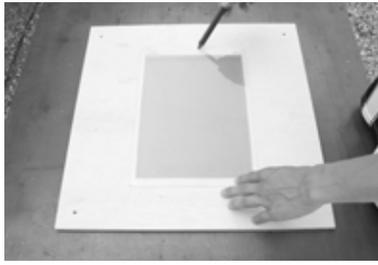
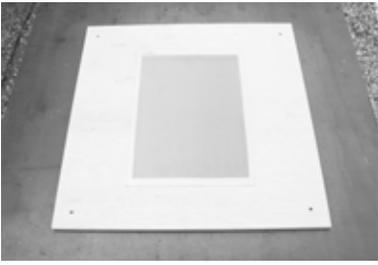
It was much easier than i first thought, but time consuming :0)





Assembling the Camera









Shooting Your First Image

Getting Started

So you build a 'Large Format Scanner Camera'? How exciting!

But how do we operate our new camera? I'm going to guide you through the first steps.

We'll start by photographing a 'Vase With Flowers' to get a grasp of the colours, lens distortion, composition, quality and texture of our new camera.



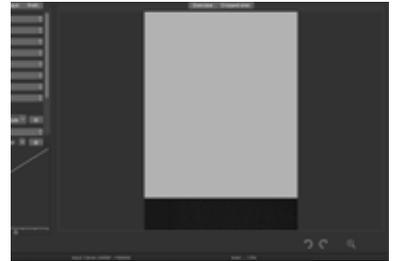
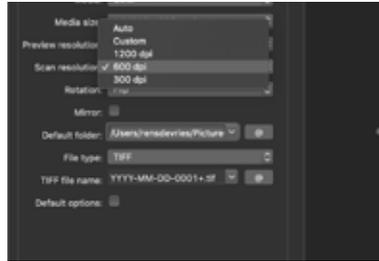
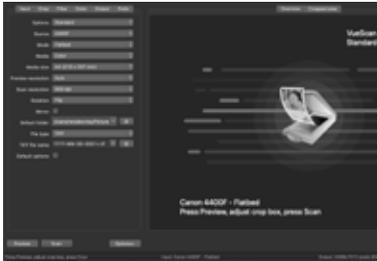
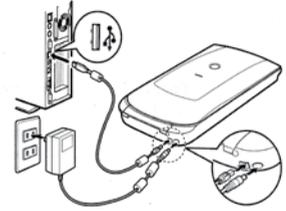
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[aperture] f/4
[iso] 500
[shutter speed] 1/100
[focal length] 28 mm

Using Vuescan

Hook your CanoScan 4400F up to your device and a power outlet as seen on the image to the left.

Your **'shutter speed'** can be slightly controlled with the VueScan **'Scan Resolution'** function. With this particular image I chose to use **'600 DPI'**

Press **'Scan'** and an image will start to appear.



Composing Your Image

We moved our camera inside, and are now working with a darker environment. This means we can use the aperture from our **'Spaghetti Measure Lens'**

Start by scanning an image to see how the light is affecting the internal CCD. If you're happy with the lighting we can now compose our image using our **'Ground Glass'**

Put a dark cloth over your head and begin moving the lens board with your bellow attached to the front or the back.

If you're happy with your focus, remove the **'Ground Glass'** and attach the **'Scanner Back'**

Scan your image.





Specifications

Scanner Type		Flatbed
Scanning Element		CCD 6-line color
Light Source		Cold cathode fluorescent lamp
Optical Resolution ^{*1}		4800 x 9600 dpi
Selectable Resolution		25–19200 dpi (ScanGear)
Scanning Bit Depth	Color	48 bit input (16 bit for each color) 48 bit or 24 bit output (16 bit or 8 bit for each color)
	Grayscale	48 bit input (16 bit for each color) 16 bit ^{*2} or 8 bit output
Scanning Speed ^{*3} (Photo or Document)	Color	7.7 msec./line (2400 dpi), 14.8 msec./line (4800 dpi)
	Grayscale, B&W	7.7 msec./line (2400 dpi), 14.8 msec./line (4800 dpi)
Scanning Speed ^{*3} (Film)		7.4–74.0 msec./line
Preview Speed ^{*3*4}		Approximately 5 sec.
Interface		USB 2.0 Hi-Speed
Maximum Document Size		A4/Letter: 216 x 297 mm
Film Type/Number of Frames		35 mm strip (6 frames max)/35 mm slide (4 frames max)
Scanner Buttons		7 buttons (PDF x 4, COPY, PHOTO/FILM, E-MAIL)
Operating Range	Temperature	10°C to 35°C (50°F to 95°F)
	Humidity	10% to 90% RH, 20% to 80% RH for film scanning without condensation formation
Power Requirements		AC adapter (100/120/230/240V) ^{*5}
Power Consumption		In operation: 17 watts maximum, Stand-by: 4 watts (Using supplied AC adapter)
Maximum Exterior Dimensions		259 x 474 x 83 mm
Weight		Approximately 2.8 kg
Optional Accessory Kit		Accessory Kit CSAK-4400F

^{*1} Optical Resolution represents the maximum sampling rate based on ISO 14473.

^{*2} For film scanning only.

^{*3} The fastest speed in USB 2.0 Hi-Speed mode on Windows PC. Transfer time is not included. Scanning speed varies according to the document types, scan settings, or specifications of the computer.

^{*4} Calibration processing time is not included.

^{*5} AC adapter type varies according to the region in which the scanner is purchased.

Use only AC adapters listed in the user instructions. (Canon AC Adapter: K30279 is for United Kingdom and K30278 is for other EU countries). Do not use them for other products

- Specifications are subject to change without notice.

Model Number: K10293 (CanoScan 4400F)



Download The Manual For Free Here!

