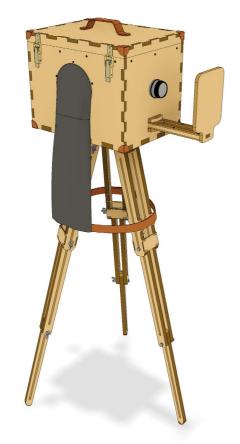
The **INSTANT BOX CAMERA** assembly

manual

Version I 2023



Welcome to the Community!

Thank you for purchasing the Instant Box Camera assembly kit. You not only bought yourself a revived piece of history, you also supported the Open Youth Organization Dorbirn, which gives meaningful work to unemployed youths and asylum seekers.

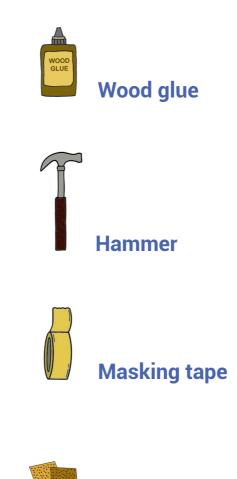
This manual goes in conjunction with animations and a full construction video. You will find links on each page to the according animation. If you run into any serious trouble reach out to us on contact@instantboxcamera.com.

The Instant Box Camera is an accumulation of many traditional designs from around the world with many different names. Andreas Huemer from eitj Design turned our version into the industrial drawings you find in this manual.



I hope you have a lot fun and creativity with our Instant Box Camera

Yours, Lukas





Wood Glue: There are different types of wood glue. Regular wood glue contracts slightly. PU wood glue expands. Both are suitable.
Hammer: Just your regular hammer is needed.
Masking tape: To create strong pressure between the wood pieces you glue together.

Sanding paper. To smoothen areas and clean the wood, especially on the light-stained version.

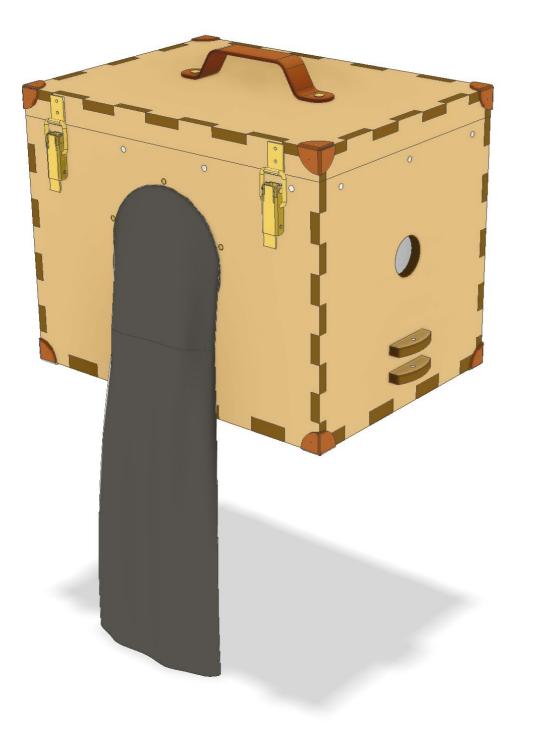
Drill: A power drill with a small drill bit will save you a lot of time. **Super glue:** We provide super glue for attaching the magnets. **Contact glue:** This is important for all non-wood parts like leather or the lens ring.

Varnish/paint: Weather you paint your box or not, you should apply at least two coats of varnish. On the lid, the negative holder, and the inside floor it would be good to apply three layers. If you have the light-stained version we would recommend painting or spray painting the inside black. Light wood could reflect intruding light.



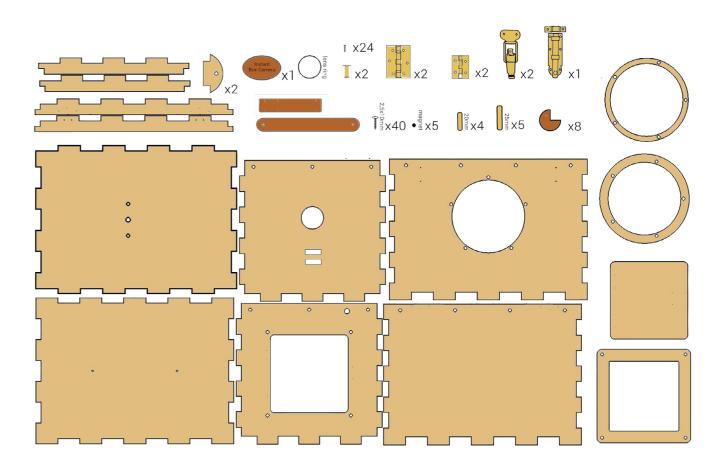






TIP : Before you glue your camera together. Dry assemble all the pieces and hold them in place with masking tape. This will help you understand the construction before applying glue.

Your camera is structured in four packages. Each with the according extra pieces needed to assemble it. Start with the box. All outside elements like leather protection, hinges, and closing mechanisms can be attached right away but we do suggest to varnish/paint the wood elements first and attach everything in the end. In this manual, to make the process and steps easier to understand, we have no varnishing illustrated. Attach the lens ring with super glue to the camera before you varnish it. The varnish will help stabilize it in place. The light-tight sleeve is attached with a rubber band on the inside of the box. Once you assembled all the pieces and your varnish is dry, you simply roll the fabric over the edge on the inside and fix it with the rubber band.



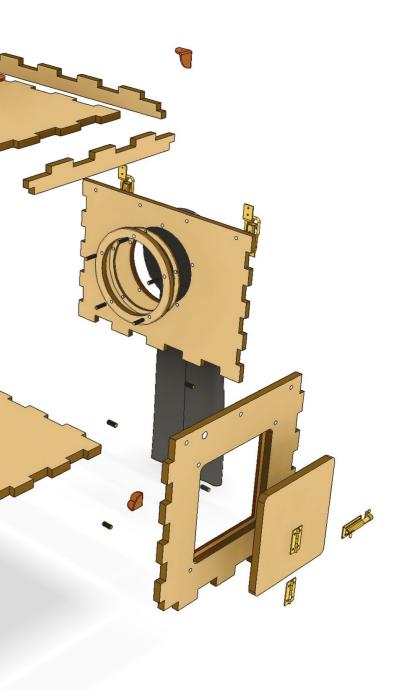


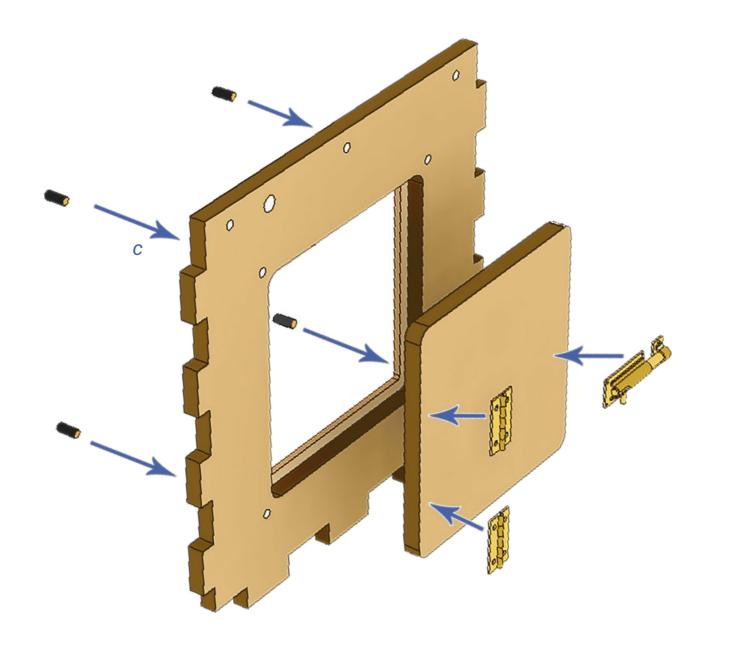
• Glue the box elements with wood glue together. Apply glue to all connecting surfaces. Make sure all markings for screws are on the outside of the box. There are three markings for the hinges on position *a*. And two markings for the tension locks on position *b*. Use clamps or masking tape to press the wood together.

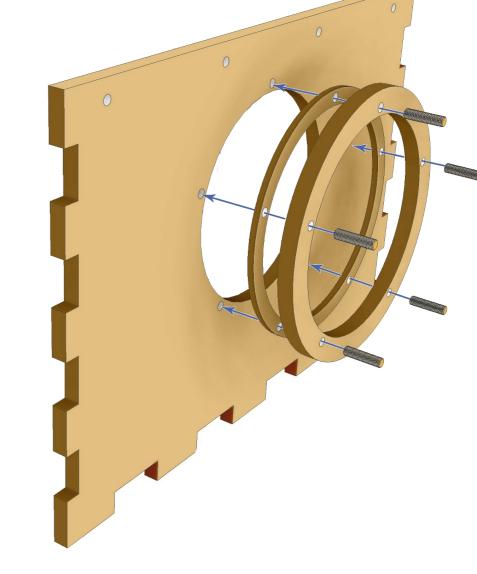
Important: Look at the red arrow above on the floor plate. Three holes outside. One hole inside

• The leather corners should be attached with contact glue and fixed with the provided nails. This you will do at the very end after you painted or varnished the camera.

• The five red arrows, on the side and top, indicate the positions for the magnets to be glued in with super glue. Do this before you varnish the camera. If you paint the magnets with colour do it at the end.

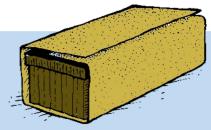


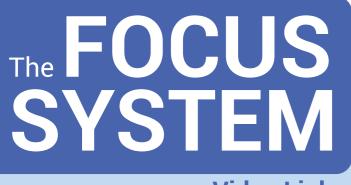




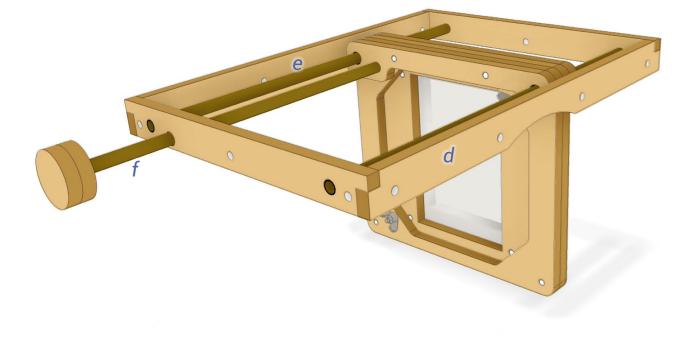
• Use wood glue to attach the extra pieces with the provided dowels. All the dowels are the correct size except for the frame on the back door. These you will have to shorten with a saw (c). And sand them smoothly with sanding paper. If you have a stained wood camera sand very carefully.

You can staple the sanding paper to a piece of wood. It makes for a very good sanding tool.

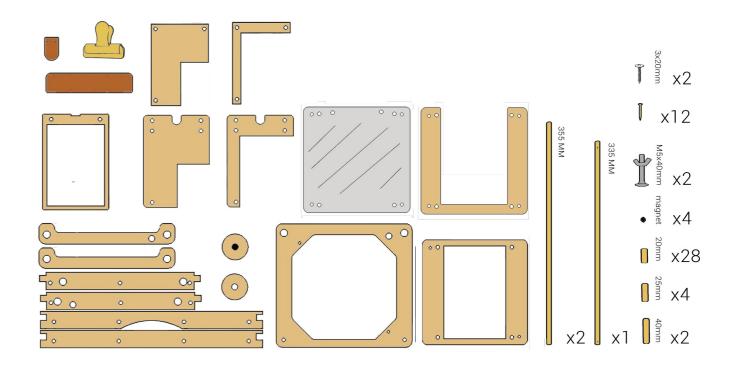


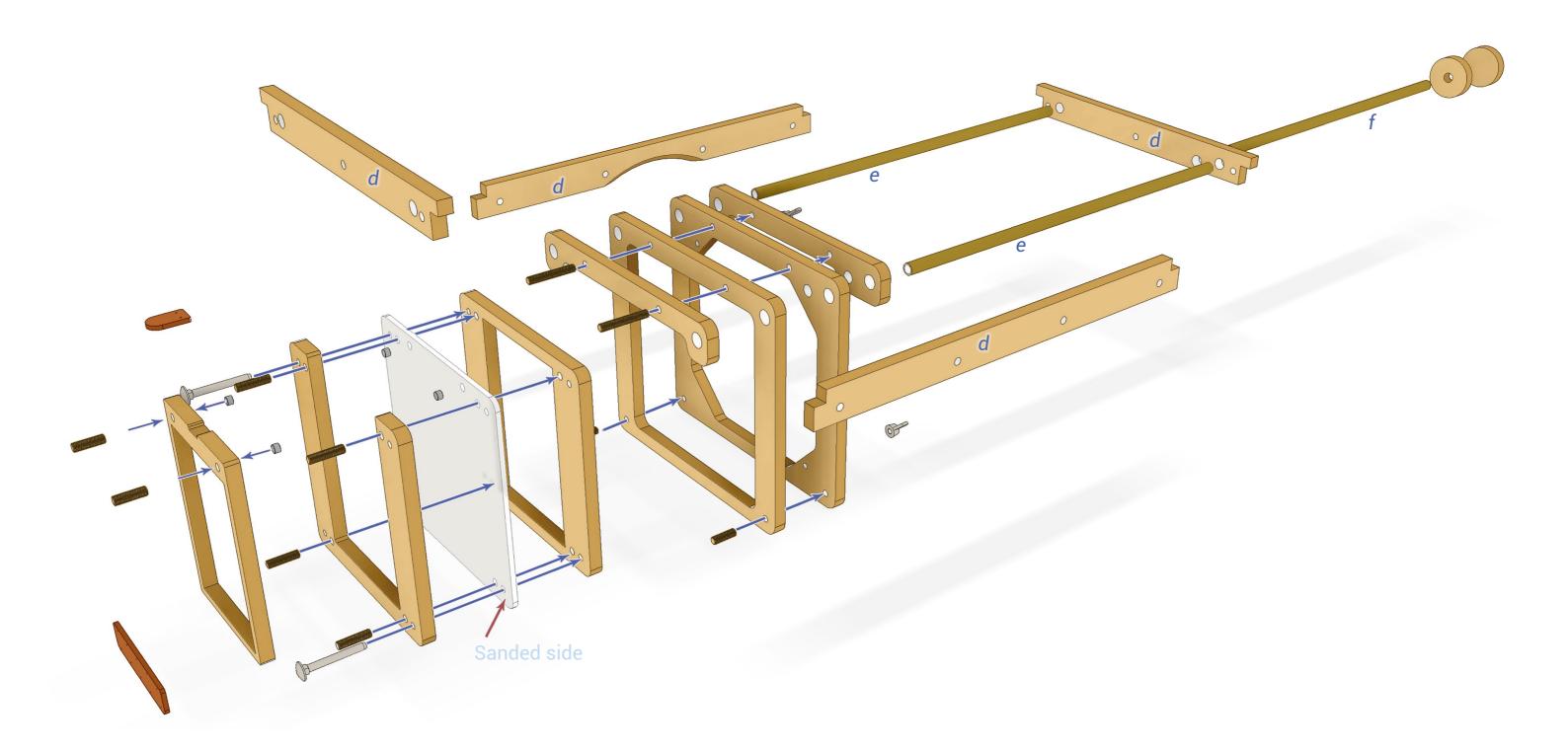


Video Link

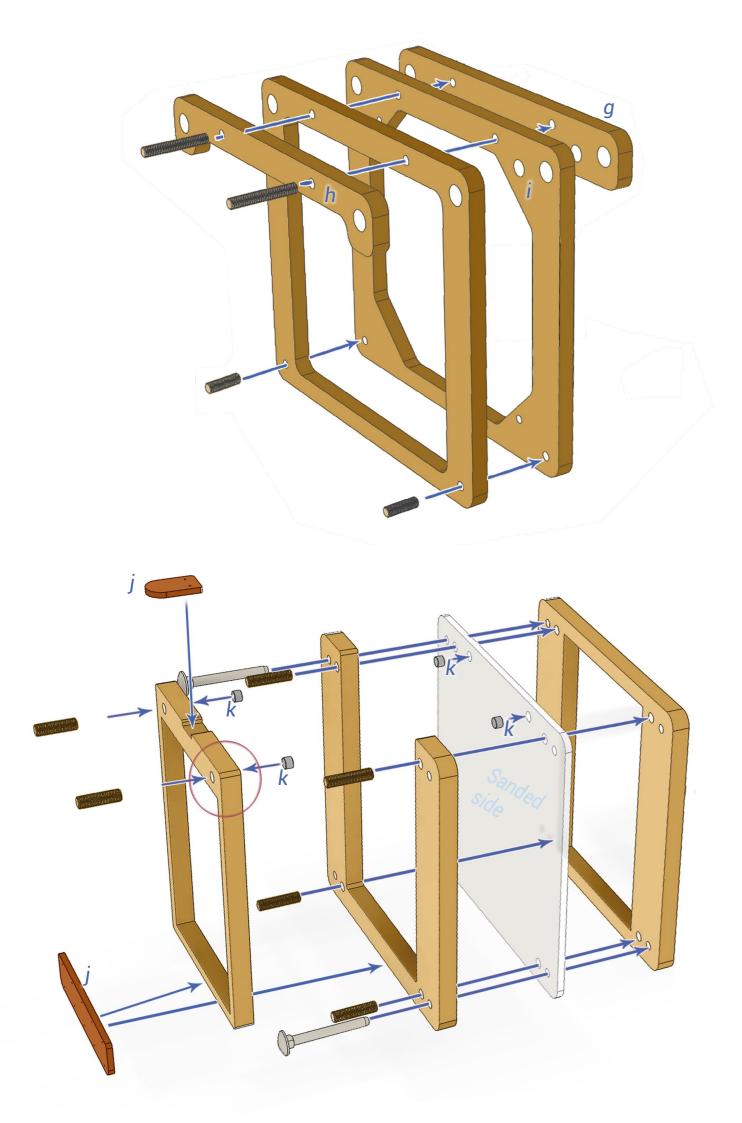


The Focus System might look a little bit challenging to assemble, but if you take it step by step, it is easy. Everything will fit in place. The only part not to confuse is how to place the acrylic glass. There is a sanded side. This side has to face towards the lens. (Details on page 12). First, assemble the two main pieces (details on pages 14 and 15). The frame elements (*d*) will be attached to the box in the final steps. There are two types of metal rods. The two stabilizing rods (*e*). They are a little longer. And the focusing rod (*f*) which you will slide through the box and into the focusing system in the final steps.





This overview shows you the different elements that make the focusing system. In this step, you will only construct the two main parts (details on the next pages). You can lay the rods (e & f) as well as the frame (d) aside for now.



TIP : Put the magnets in place and let the liquid super glue run inbetween the magnets and the wood/acrylic. The glue will find its way through the cracks by itself.

• First, glue together the focusing frame with the provided dowels (short and long ones). Apply wood glue between the wood pieces and in the dowel holes. Watch out that the elements *g* and h are placed correctly. *G* has three holes for the metal rods and *h* only two. It corresponds with the frame (*i*) which is more angled and has three holes as well.

• The Focusing plate on the left bottom includes the acrylic glass and various wood elements. Use the provided dowels to create good stability between the pieces. You can use contact glue between the wood and acrylic glass. The leather pieces (*j*) are to be attached once you varnished or painted the wood. All leather pieces are best glued with contact glue to the wood and then nailed with the provided tiny nails. The leather strap acts as a hinge and is the sole connection to the frame.

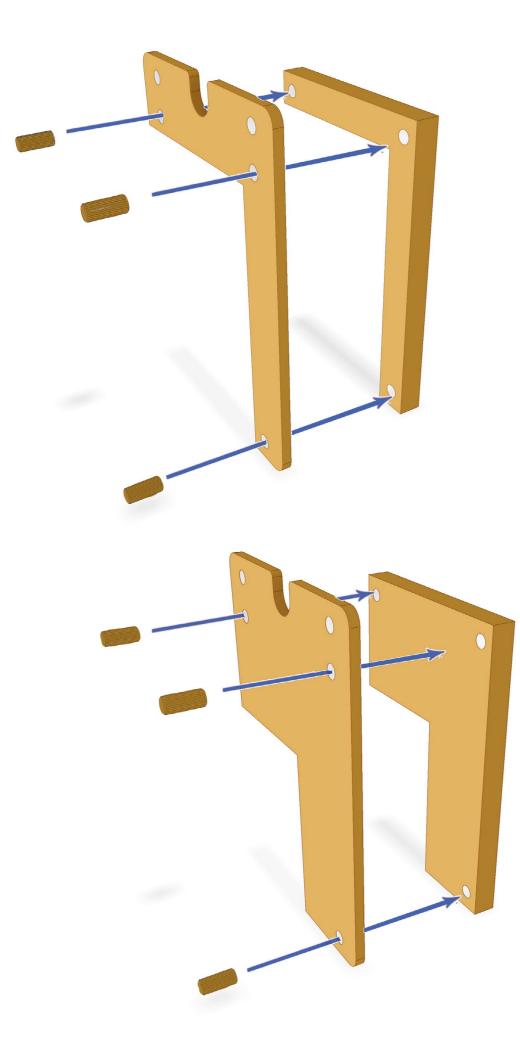
The only part that needs a bit of attention is gluing the magnets (k) correctly. Magnets have polarity. They can either attract each other or push the other magnet away. The magnets in the frame and the acrylic glass have to be glued in (with super glue) at the right polarity. Where the red circle is you will see that on one side you glue in the magnets and on the other a dowel that is sticking out. Let it stick out. It is for our paper adapters (more on the next page).



The leather hinge might be a bit stiff in the beginning but after using it for a few times it will get lose. On the right we see how the plate is screwed into the frame. The plate can be attached in horizontal or vertical position.









We have two adapters for different-sized paper. The elements are to be attached with the provided dowels and wood glue. The dowels will be sticking out a bit. Saw the ends off and sand them smooth. The Paper adapters fit over the focus frame. Where you have the dowels sticking out (glued together with the magnets).

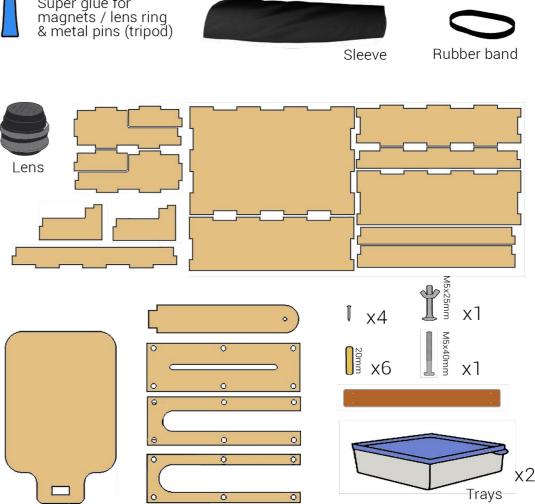


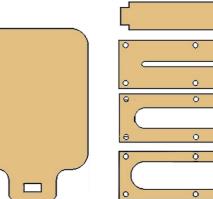
Video Link

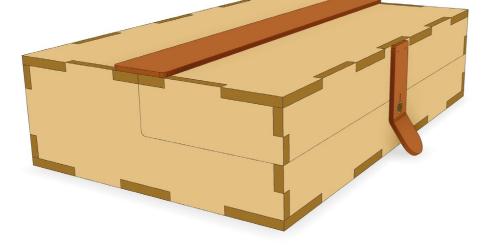
Our next elements are the paper box and the negative holder. The paper box is a light-tight box for your photographic paper and the negative holder is used to photograph your negative in front of the camera to get a positive image. The paper box has two leather elements, which you glue on with contact glue once the box has been varnished or painted. You will see there are small holes indicated in the leather pieces you can use the mini nails provided.

Super glue for magnets / lens ring & metal pins (tripod)

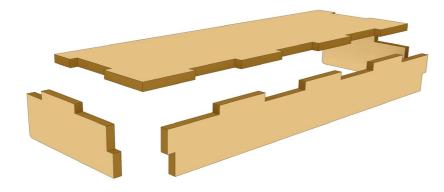


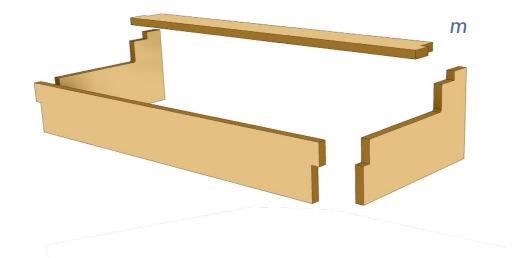


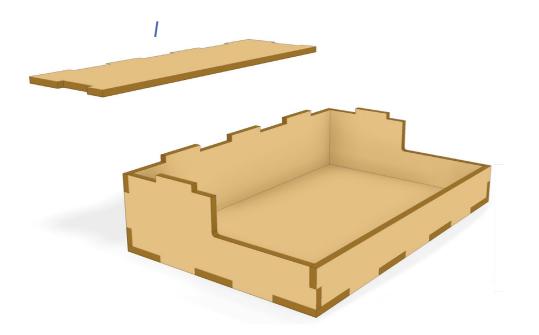




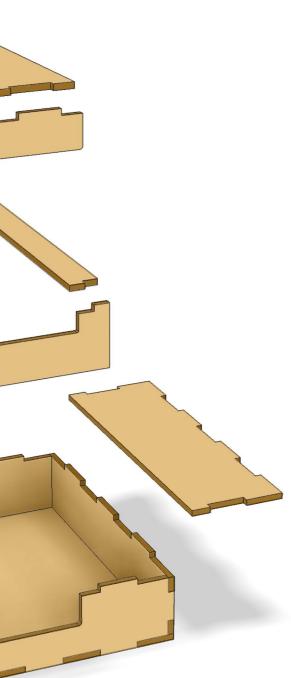
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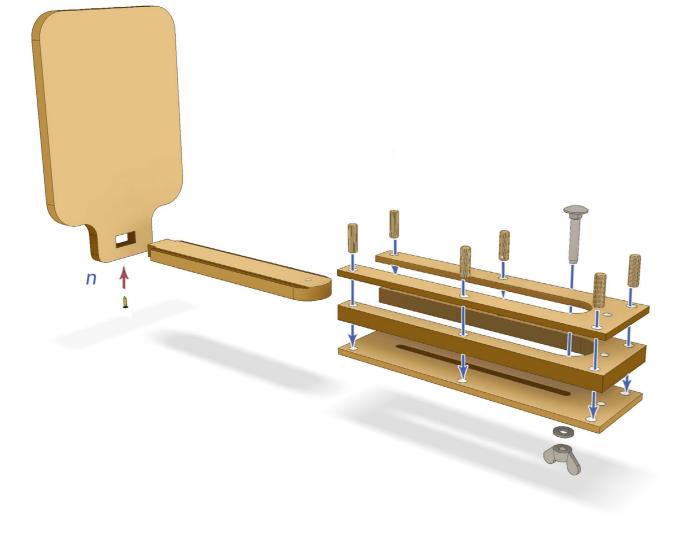


Start with the paper box lid. Make sure you are using masking tape once you applied the glue, to create tight pressure. We want this box to be absolutely lightproof with no holes. Leaving the lid to dry, start with the bottom part. Glue everything together except the top (*I*) and attach the inlay (*m*). This is best illustrated in our animation here. Finally, attach the top piece of wood (*I*). Varnish the box and after that attach the leather with glue and nails and add the final screw to the opening tab.



TIP:

The negative holder is constantly exposed to water. Varnish it several times.



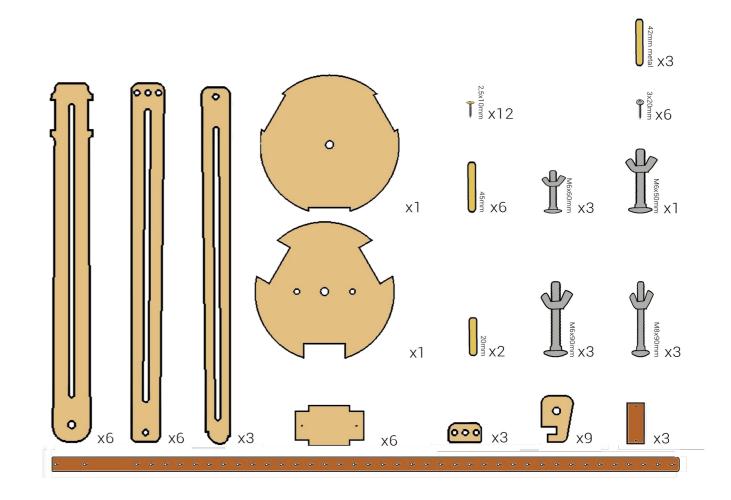


The paper holder is very easily assembled (find an <u>animation here</u>). Glue all wood elements together with the provided dowels. On the holder (*n*) you could use an additional screw for extra stability. There is no marking on the wood. It is optional. Wood glue will create a great bond between the two pieces.





Our tripod is very lightweight yet stable enough to hold the weight of the camera. We suggest you do not fully extend the tripod for added stability. When you use it make sure the legs are wide enough apart. The leather belt attached to the screws on the tripod legs prevents the legs from moving. Make sure that you tighten all the screws and bolts at all times when you use the tripod with the camera. Assembling the tripod is very easy. Look at the different pieces, you will find twice six identical pieces and once three identical pieces. Separate them into three legs and you can start.

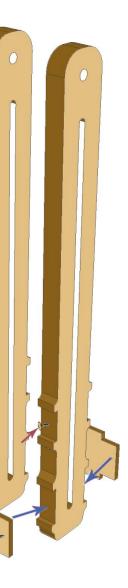


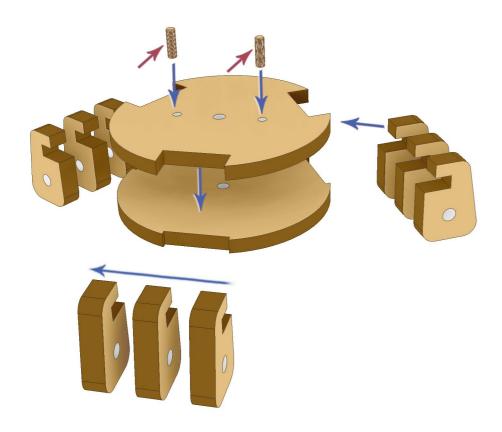


• Take the single leg (bottom leg) and glue the small metal bolt centered in the middle. This bolt will hold your tripod leg in place once attached to the other parts. The leather shoe on the bottom can be glued and nailed after varnishing.

• Glue the middle part with the two long dowels together. Keep the center hole of the three holes empty and check that no glue hardens in there, as we will use this hole for our locking bolts.

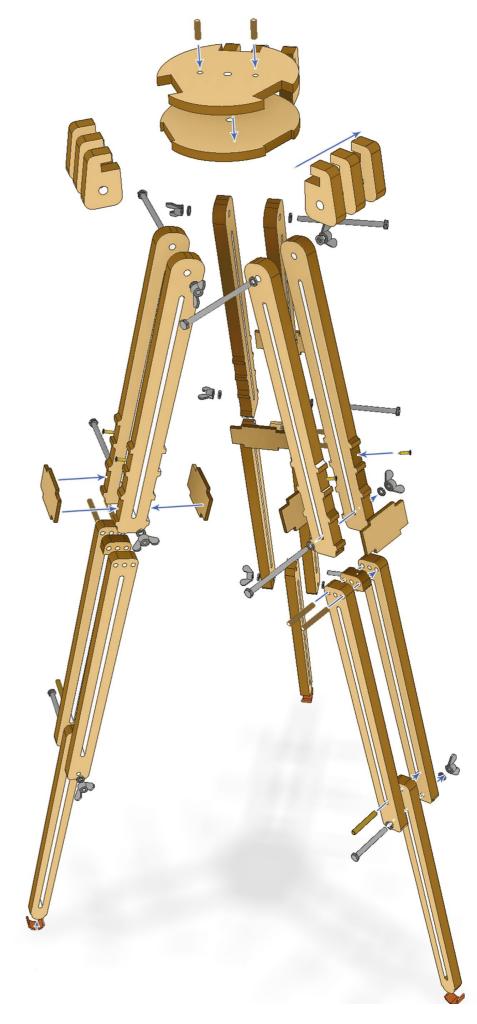
• The top legs consist of four pieces. Take the small plates and glue them to the above-indicated spot (blue arrow). There are small markings for screws to make sure the plates are firmly secured. The red arrows indicate where you will place the larger screws. They should stick out about 6 mm. These screws are later used to fasten your tripod belt.





The tripod plate consists of several similar elements. First, glue together the two round plates. While the glue is still moist attach on each of the three sides the nine hook-shaped parts to the plate with wood glue as well. They fit perfectly together. As always use masking tape to create good pressure between the pieces. Glue the two dowels on the top. These will be too long. Once the glue has dried cut them so that a maximum of 4 mm sticks out. These two nobs will keep your camera and tripod aligned while the center hole is for a bolt to attach the camera with the tripod.

Once everything is varnished and very dry. You can assemble the tripod with all the nuts and bolts provided. Here a video.



The LAST STEPS Video Link

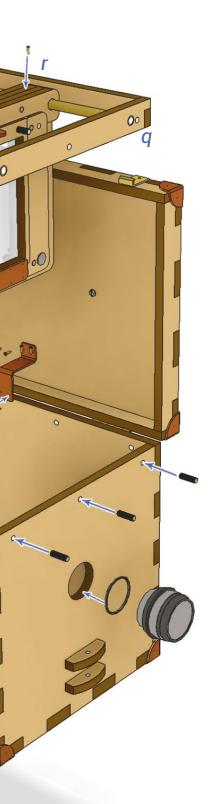
Time to put it all together. Once you varnished or painted, varnished all your wood pieces, elements on, and attached the hinges

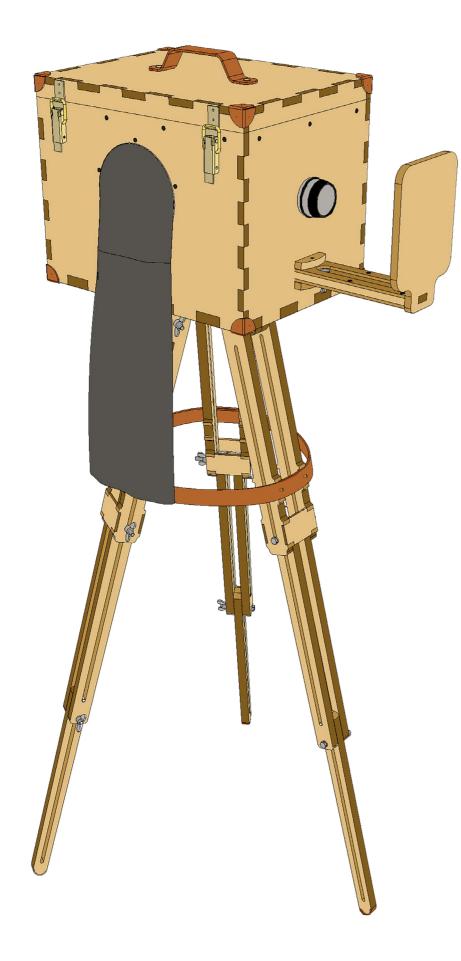
or painted and glued the leather and closing

mechanisms, it is time to set in the focus system. Look at the frame on the right side. The frame with the indication (p) goes in the back with the hole for the focus rod (f) overlapping. The frame element (q) has a short and long distance between the holes. The short distance goes where the letter (q) is indicated. If it is the wrong way around the focus system will not be smooth.

You can attach three sides of the frame with dowels to the box before placing the stabilizing rods (e) into the frame with the focus plate. If something does not fit correctly take it out and try again. Everything should fit snugly. The two round elements (s) build the knob of the focusing rod. The wood parts can be glued together with wood glue and attached to the focus rod with contact or super glue. Finally, slide in the focus rod and glue it to the focus plate with contact or super glue as well. For extra stability drill a small hole into the wood and metal rods on position r and s. The hole can be tiny, attach a screw for full stability. If you don't have a drill with a small metal bit you can use a smaller screw to simply squeeze the rod and wood together.

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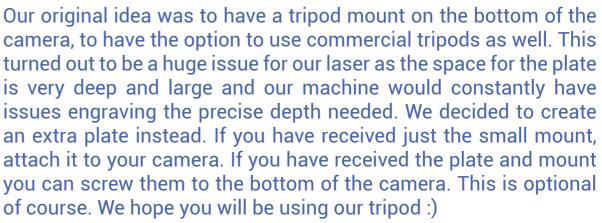


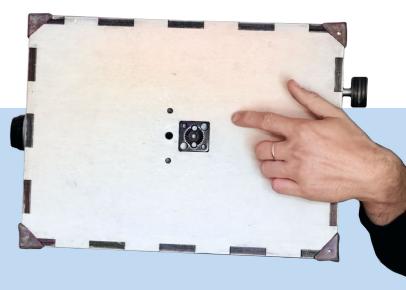
AVIEWNOTES

Below you see two different styles of tripod legs. You may have received one or the other. The light brown leg with the extra structure was an idea we had while already having produced many tripods. It basically indicates where the belt goes. If you have received the earlier version you can choose wherever you want the tripod belt to be placed.

Wood stain:

The two tripod legs were stained with the same product. The wood we receive is so different in nature that such variatiens can happen. We try to match all pieces.







camera, to have the option to use commercial tripods as well. This turned out to be a huge issue for our laser as the space for the plate is very deep and large and our machine would constantly have issues engraving the precise depth needed. We decided to create an extra plate instead. If you have received just the small mount, attach it to your camera. If you have received the plate and mount you can screw them to the bottom of the camera. This is optional

On our website you will find tutorials and material lists for chemicals and papers. If you still have questions, get in touch.

