

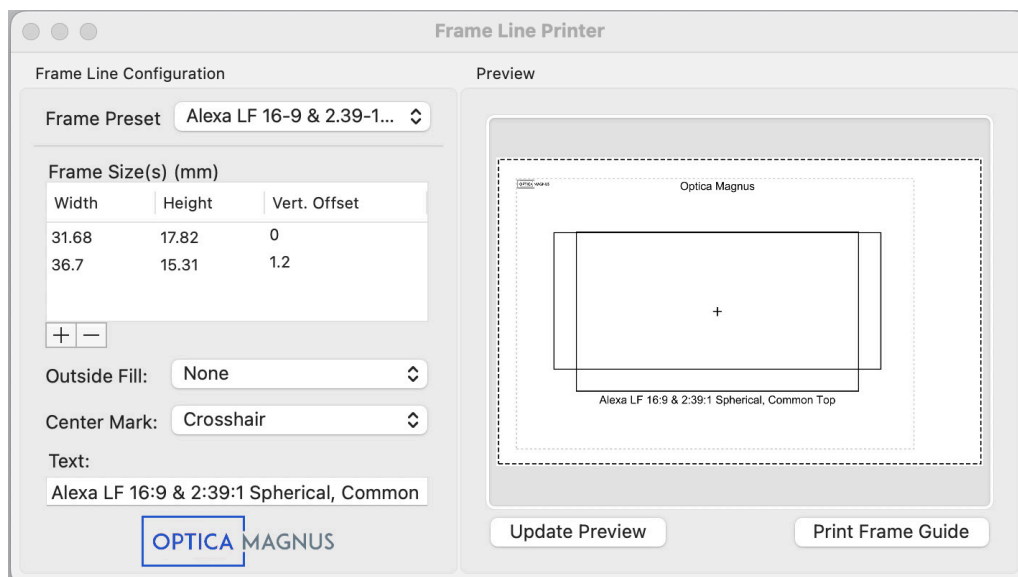


Full Frame Finder Frame Line Creation, Insertion, and Removal

The Optica Magnus Full Frame Finder has the unique capability to display **any** frame-line arrangement the user desires, to suit the camera sensor size, and post-production image extraction requirements. One, two, or three user-defined frame-line rectangles can be displayed, with or without a center dot or cross, and user defined common center, common top, or other relative arrangement, to suit each user's requirements.

The frame-lines are printed using a Laser Printer, onto clear high temperature-resistant polyester film, which is then cut out, and inserted in a slot in the side of the viewfinder, in front of the ground glass. The “**FrameFinder**” App is available in either Windows or Mac, on their respective app stores. Using that app, the user can define the dimensions in **millimeters**, to two decimal places, the size and position of the frame line rectangles. There is an option to print a center cross, a dot, or nothing. Optionally, a surround pattern can be printed, either a cross-hatch, or two levels of gray. There is a field at the bottom, to print some visible text the user can define, if desired. A outer, dotted rectangle is always printed as a guide to aid in cutting out the plastic sheet, before inserting it into the Finder.

Download the app, and install it on your computer. After launching the app, enter the dimensions, in **millimeters** (*not pixels*) to two decimal places of the width and height of the first frame-line rectangle. If a second or third set of frame-lines is desired, click on the “+” button, enter those, and define the Vertical Offset of how they are to be placed, relative to the first set of frame-lines. The first frame-line rectangle is *always* centered on the center of the camera frame; and the same with the optional cross, or dot. *Why not pixels?* We want this finder to be universally applicable across all cameras and sensor pixel pitches, now and into the future. The frame-line dimensions in millimeters for different sensor formats are available on the camera manufacturer's web sites.



Above is an example of two commonly used ARRI Alexa LF frame-lines, superimposed, with “Common Top” placement of the second set of frame-lines. After entering the Frame Size dimensions, and Text, click on Update Preview, to display all the components in the Preview window. Any changes can be entered and previewed. After loading the proper clear polyester film in the Laster Printer, you can then click on Print Frame Guide to print the pattern on the film. The app prints eight identical patterns on the film, for use in multiple finders, or as spares for later use. You can also “Save As” then later “Open” or “Open Recent” frame-line designs. See page 7 for further info on “Frame Preset.”



Tools required to install the plastic sheet with frame lines in the Finder:

- Scissors, or X-Acto Knife & Metal Straight Edge
- Tweezers or Needle Nose Pliers
- #0 Phillips Screw Driver

Description of the parts of the Full Frame Finder:



The laser printer we have tested to print the Frame-Lines on the plastic sheet is the Brother HLL2350DW, though other similar monochrome laser printers might work well.

<https://www.brother-usa.com/products/hll2350dw>

After a lot of experimentation, the recommended clear film is:

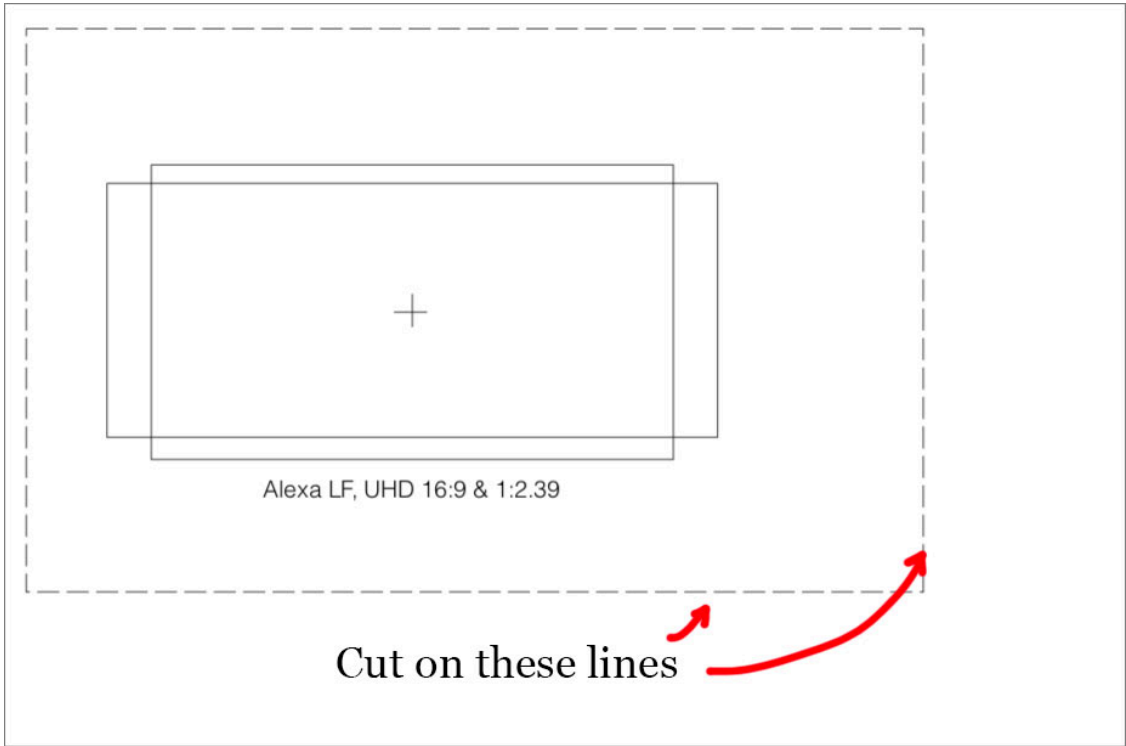
Koala Transparency Film, 8.5" x 11", 4.5 mil, for **Laser Printer**, Part number **LF-20**

https://amazon.com/KOALA-Film-Laser-Printer-Sheets/dp/B07KP1G6DV/ref=sr_1_10?dchild=1&keywords=Koala+LF-20&qid=1594587245&sr=8-10

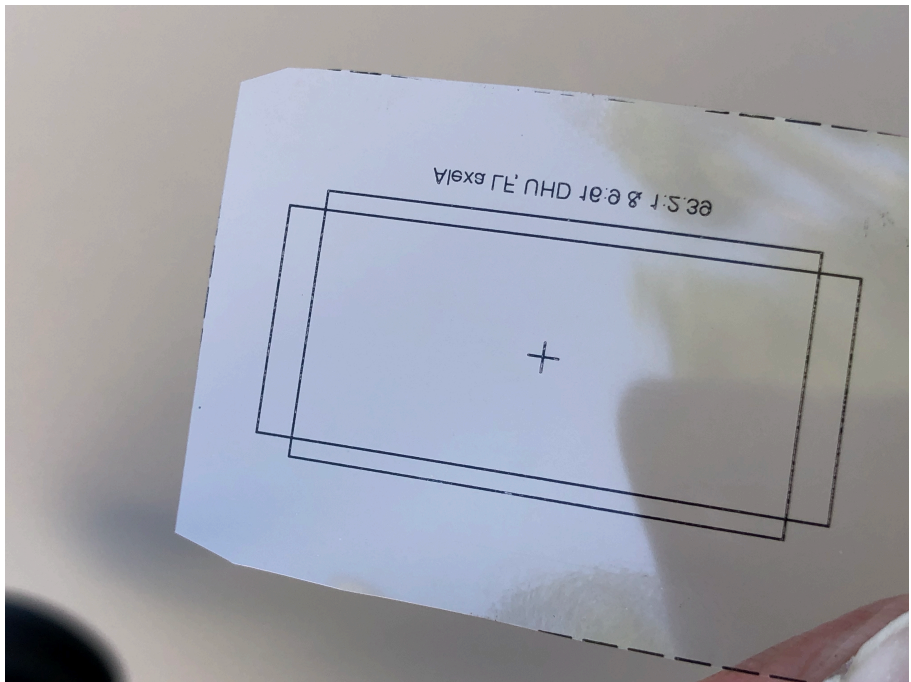
Warning, this polyester film is *very heat resistant* to withstand the high temperatures found inside a laser printer. If you were to use clear film intended for inkjet printing, it will melt inside the laser printer, and permanently destroy it. (*Trust us on this!*)

Instructions to install the clear film with printed frame-lines in the Full Frame Finder

After designing and printing the frame-lines on the clear plastic sheet using the FrameFinder app, cut out the sheet, using the dotted lines as a guide.

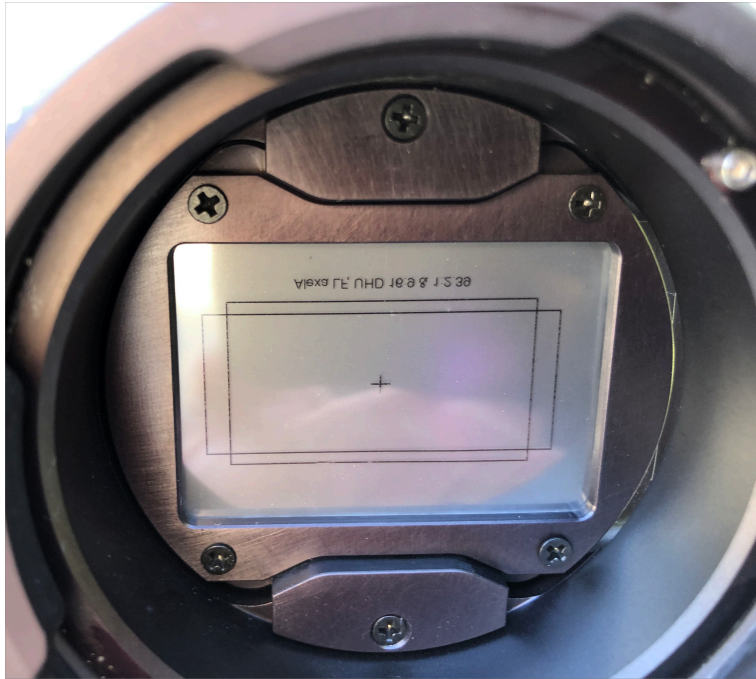


Trim the two short side corners at an angle, as seen in this photo:

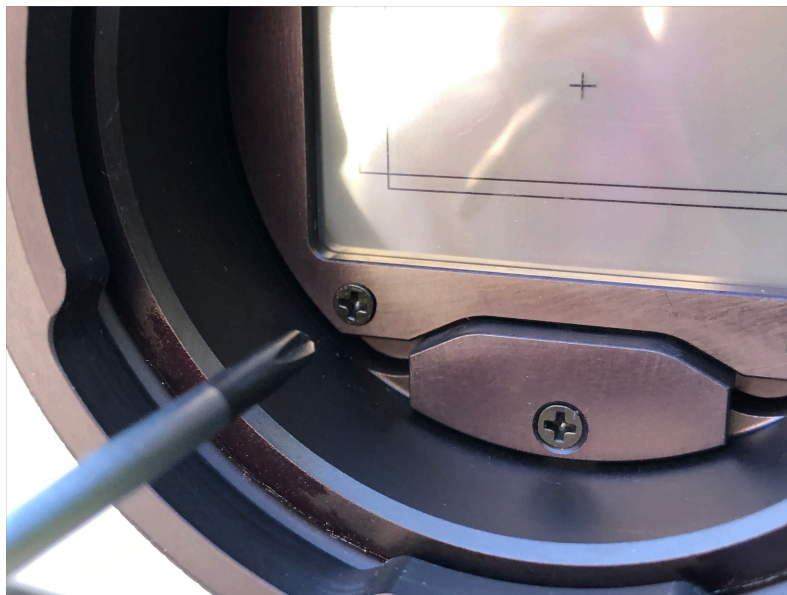


On the Full Frame Finder, rotate the Plastic Sheet Access Cover ring, located just forward of the handle mounting attachment, to open the plastic sheet access slot in the side of the finder. (See Description photo on Page 2, which shows the direction to turn the ring 90° to open the access slot.)

Remove the Lens Mount Adapter from the front of the Finder, by loosening the Locking Screw, then loosen the Neutral Mount Lock Ring. As seen from looking into the front of the finder, the plastic sheet needs to be oriented with the *upside down, and reversed*, as shown in this photo. Also, note the four small Phillips-head screws in the corners of the rectangular plastic sheet retaining frame.



Using the #0 Phillips-head screwdriver, loosen those four screws, one full turn of rotation, in the corners of the frame, as seen in this photo. *There is no need to remove them.*



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To properly orient the cut plastic sheet, when viewed from the eyepiece end of the finder, the writing on the plastic sheet should be readable, and upside down.

Then, holding the plastic sheet by the tab on the long side, insert it into the slot, in front of the ground glass, accessible through the open Access Cover in the side of the Finder, as seen in this photo.



Then, looking into the front of the finder, center the frame-line pattern, left to right, and top to bottom, and adjust any slight rotation if necessary, occasionally checking the alignment by looking into the eyepiece. Once aligned, gently tighten the four Phillips-head screws in the corners of the frame.

When finished, rotate the Plastic Sheet Access Cover ring closed to the detent.

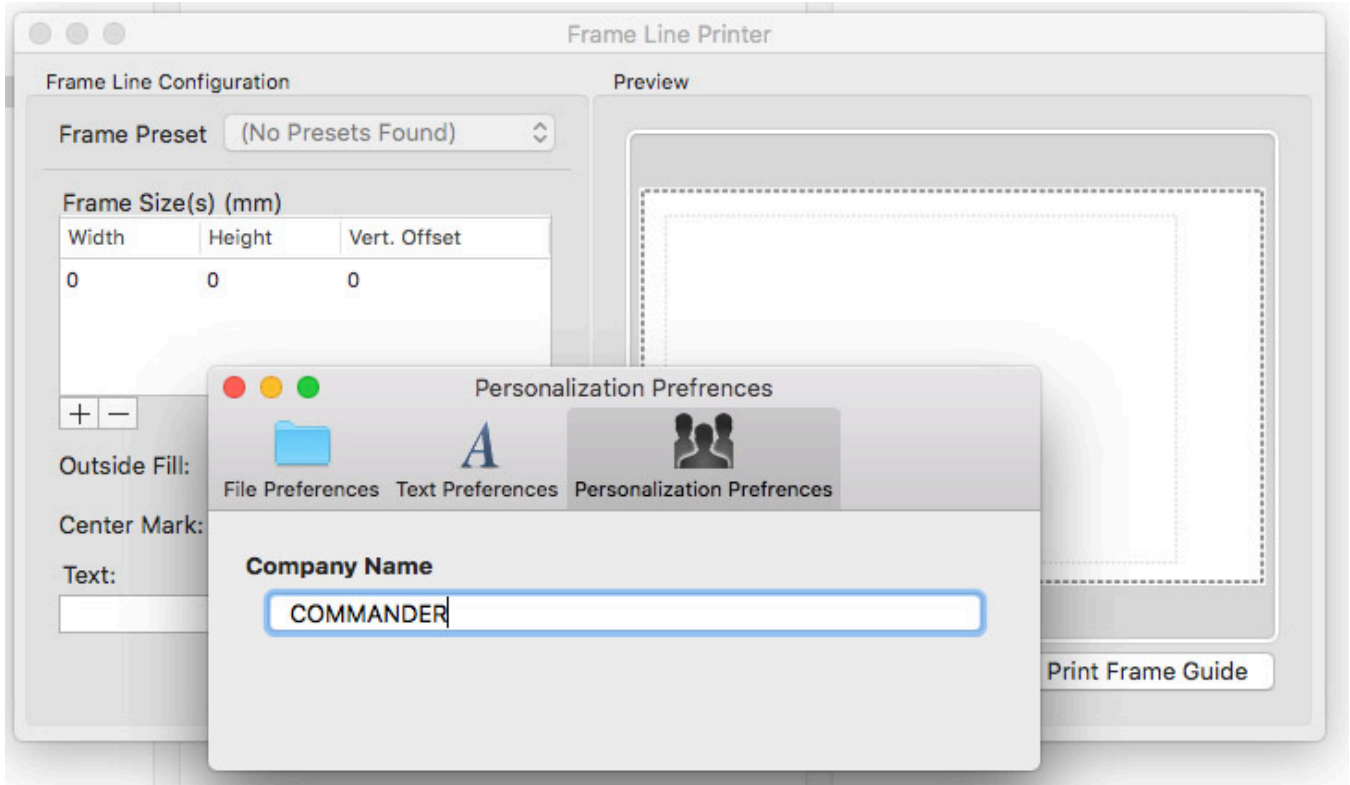
Re-install the Lens Mount on the front of the Finder. Firmly tighten the Neutral Mount Lock Ring, then gently tighten the Lock Ring Safety Screw.

This completes the process of installing the Clear Film with Frame Lines.

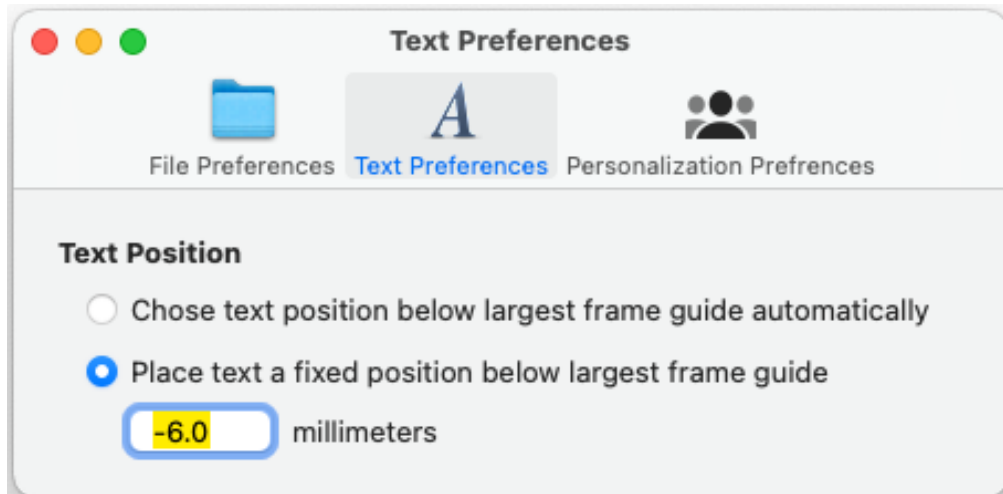
Note: If you find you need to adjust the flange-focal distance of the Full Frame Finder, you will find those shims located under the ground-glass holder, which is easily removed by removing the two Phillips-Head screws located in the center of the ground-glass holder, at the top and bottom, as seen through the front of the Finder, with the Lens Mount removed. Either increase or decrease the thickness of the shims located there, to adjust the flange-focal distance as necessary.

To change the company name that is printed at the top of each frame line plastic sheet:

With the FrameFinder app running, choose from the menu at the upper left of your computer screen: FrameFinder / Preferences... / Personalization Preferences tab. Then enter the company name in the field there, close the window, then click “Update Preview” in the app window bottom center. That company name will be saved and displayed in all frame line prints when you re-launch the app.



In this same Preferences window, the “Text Preferences” tab allows you to choose if the Text that is printed *below* the frame line on the plastic sheet is positioned automatically, or allows you to manually adjust the position. Negative and positive position numbers are allowed.





To define where on your computer the Frame Presets will be saved:

Select “Frame Finder / Preferences...” from the upper left corner of the menu bar on your computer screen. Then select the “File Preferences” Icon button.

Click on the “Browse” button. Then navigate to where you want to create the Frame Finder Presets folder, create a new folder, then name it something appropriate. Then, when working with the app to create a new frame line, *after* you have created a frame line design you want to keep, choose “File / Save As...” from the upper left corner of the menu bar on your computer screen. Name the file something concise, like “Mini LF, 4-3”

[Note: Do not use the “/” (forward slash) or “:” (colon) characters in these computer file names, as they are not allowed by the Mac OS. (*Bad* things will happen, trust me.) Hence I used “4-3” instead of “4/3” or “4:3” etc. However you *can* enter any characters you choose in the “Text:” field in the lower left of the app window, to be printed across the bottom of the plastic sheet with the frame lines, including the forward slash and the colon characters.

After you do the “Save As” for the design, that unique design will then appear in the drop-down menu in the upper left corner of the Frame Finder app window called “Frame Preset” I you select a saved design from the drop-down menu, all of the settings will be automatically entered. You can of course use that design to print again, or use that as a starting point to modify to make a new different design.

