

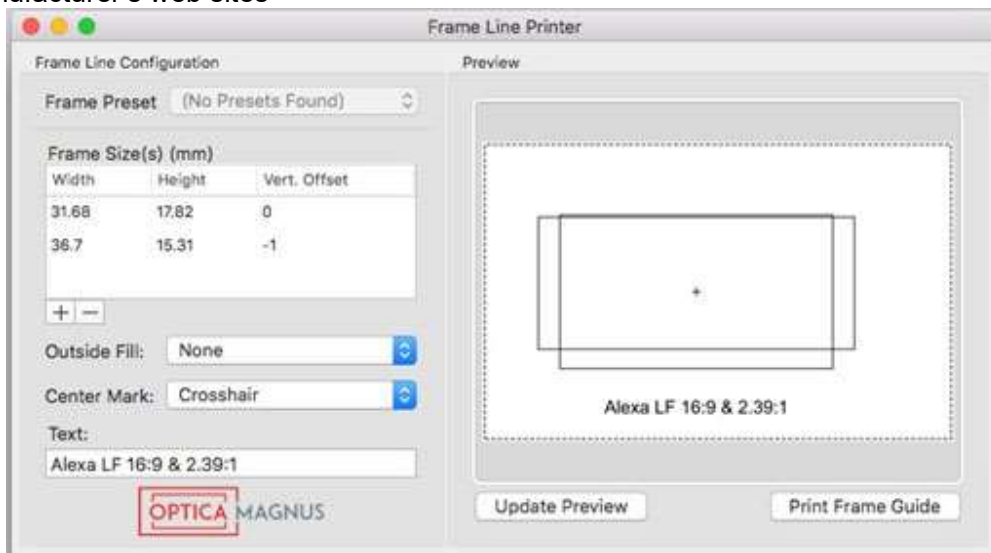


Full Frame Finder Frame Line Creation, Insertion, and Removal

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 also 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 Alignment 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 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 center" 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.



Tools required to install the plastic in the Finder:

Scissors, or X-Acto Knife & Metal Straight Edge
Tweezers or Needle Nose Pliers
2mm Allen Key
#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 Samsung ProXpress M3320ND, though other similar monochrome laser printers might work well.

https://amazon.com/Samsung-ProXpress-SL-M3320ND-Monochrome-Printer/dp/B00COA3GVE/ref=sr_1_4?dchild=1&keywords=Samsung+ProXpress+M3320ND&qid=1594587649&sr=8-4

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

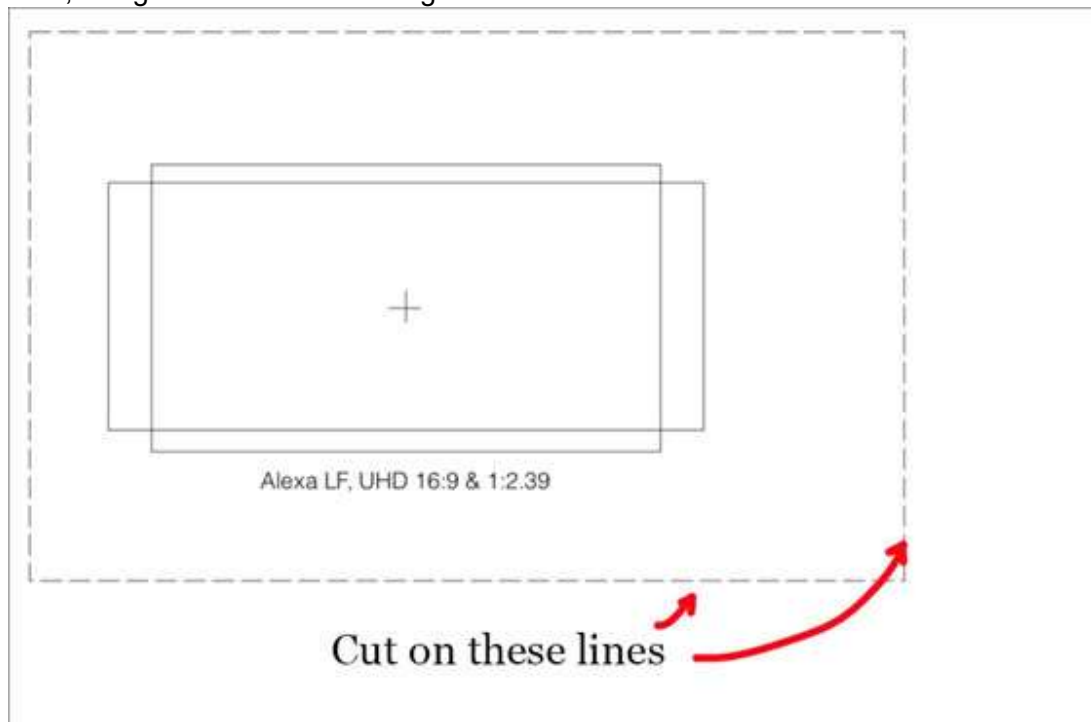
Koala Transparency Film, 8.5" x 11", 4.5 mil, for Laser Printer, Part number LF-20

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

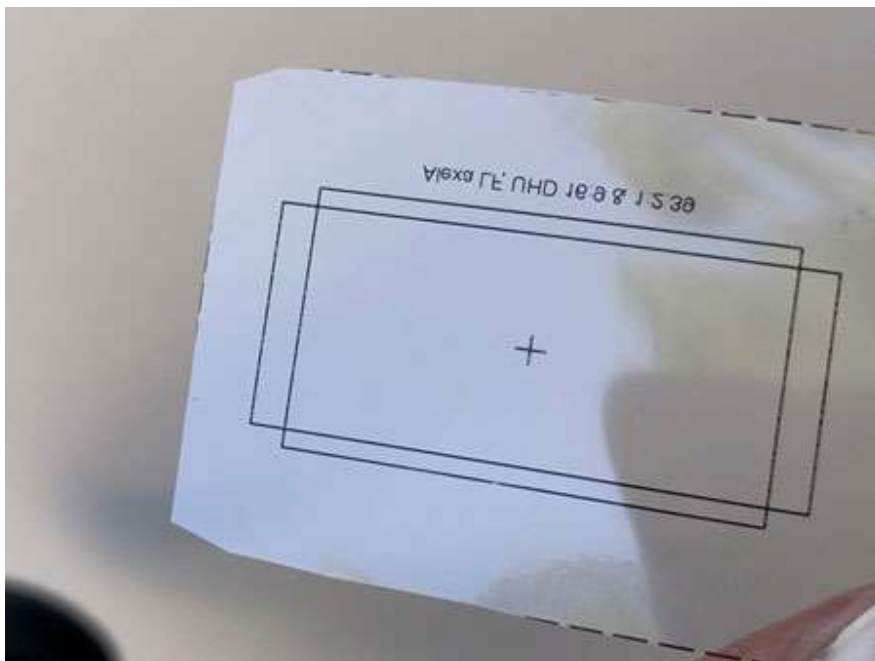
Warning, this polyester film is *very heat resistant* to withstand the high temperatures found inside a laser printer. If you were to use clear film intended for inkjet printing, it will melt inside the laser printer, and render it un-useable. (Trust us on this.)

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.



Then, trim the two left side corners at an angle, as shown in the this photo:



Using the 2mm Allen Key, loosen the two locking screws one half turn, in the Frame-Line Plastic Sheet Access Cover, as shown in this photo:



Then, pull the Access Cover straight out the side of the Finder, using the silver knurled knob.



Remove the Lens Mount from the front of the Finder, by loosening the Neutral Mount Lock Ring. As seen from looking into the front of the finder, the plastic sheet needs to be oriented with the words at the top, 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.



Then, holding the plastic sheet by the tab on the right 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 and top to bottom, and adjust any slight rotation if necessary, occasionally checking the alignment by looking into the eyepiece. Once aligned, tighten the four Phillips-head screws in the corners of the frame.

Re-install the Access Cover, and tighten the two set screws in the Cover, with the 2mm Allen Key.

Re-install the Lens Mount on the front of the Finder.

This completes the process.

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.

SEP