

Introduction

The Daylab 35 Plus Multi-format Slide enlarger enables you to make enlargements of 35mm slides on to Polaroid or Fuji peel-apart instant films. With its modular components, the Daylab 35 Plus is easy to assemble and simple to operate. The enlarger head is designed for use with any of four interchangeable bases, giving you the capability of using different Polaroid instant film formats. The Daylab 35 Plus comes with a base that uses the 4x5 instant film format. Featuring built-in color filters, automatic exposure control, manual exposure adjustment and enlarging capabilities, the Daylab 35 Plus allows for a wide range of creative applications, including the Polaroid Image/Emulsion Transfer processes. (For detailed information about these processes, visit the Daylab Web Site www.daylab.com).

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Daylab 35 Plus Components

The letters throughout the text refer to the Daylab 35 Plus illustration on page 10 of this manual.

The Daylab 35 Plus has two main components:

1 The enlarger head (a): With built-in color filters, automatic exposure control, manual exposure adjustment and enlarging capabilities.

2 The film-holder base (g): You can choose from four film holder bases for your system that enable you to use the following peel-apart film formats: 3 1/4 in. x 4 1/4 in., 4 x 5 in. and 8 x10 in. The bases are easily changed at any time. Each base comes with either a dark slide or a focusing panel (f) that is to be inserted into your film holder. When fully inserted into the film holder, it prevents accidental exposure of your film. This dark slide/focusing panel has a white surface for use when you compose and focus your image.

Three bases are available for the Daylab 35 Plus (for a complete list of accessories, see page 8).

3 1/4 x 4 1/4 Base: For use with 3 1/4x 4 1/4in. pack film. With the 3 1/4 x 4 1/4 base, you can enlarge a projected image by 54% The 3 1/4 x 4 1/4 Film Holder is built into this base.

4 x 5 Base: This base has a Graph-Lok adapter, a built-in locking system, that accepts either the Fuji 4x5 or Polaroid Model 545, 545i or 545 Pro Film Holder for use with 4 x 5 in. single sheet films. With the 4 x 5 base, you can enlarge a projected image by 60%.

8x10 Base: For use with Polaroid 8 x10 in. film. This base accepts a Polaroid Model #81-06 Film Holder. With the 8 x 10 base, you can enlarge a projected image by 78%.

Preparing your film holder

Recommended film types for specific Daylab 35 Plus applications are listed in the chart below. **Before** loading the film, you may need to prepare your film holder, depending on which film format and Daylab 35 Plus base you plan to use.

4 x 5 base: You can use three types of film holders with this base.

The Polaroid Models 545, 545i & 545 Pro Film Holders: To view and focus your images use a white object (ie: piece of paper, white plastic card). Place it on top of the film holder so that it will look the same as the final image. The Daylab will also work with the Fuji 4x5 film holder.

8 x 10 base: The 8 x 10 base is intended for use with the Polaroid #81-06 Film Holder which can be used with either the Polaroid 8 x 10 Film Processor or the Calumet 8 x 10 Instant Film Processor. Before loading film, take the dark slide that comes with 8 x 10 base and insert it into the film holder. Be sure that the **white side** of the dark slide faces upward, to compose and focus your image.

3 1/4 x 4 1/4 film holder: The film holder that is built into the 3 1/4 x 4 1/4 base comes ready-to-use. Continue with loading film.

Loading film: To load film, refer to your film holder instructions. *Note: When using either the 3 1/4 x 4 1/4 or the 4 x 5 film-holder base, load your film into the film holder before assembling the enlarger head and the base.*

Recommended Polaroid peel-apart instant films, for use with the following Daylab 35 Plus applications:

| <i>Film format</i> | <i>Image/Emulsion transfer</i> | <i>Slide copies</i> | <i>Inter- negative</i> |
|----------------------------------|---------------------------------------|----------------------------|-------------------------------|
| <i>Color Applications</i> | | | |
| 3 1/4 x 4 1/4 pack film | 669 | 679 & 669 | |
| 4 x 5 pack film | 559 | 559 | |
| 4 x 5 sheet film | 59 | Polacolor pro 100 & 59 | |
| 8 x 10 sheet film | 809 | 809 | |

Recommended Fuji peel-apart instant films, for use with the following Daylab 35 Plus applications:

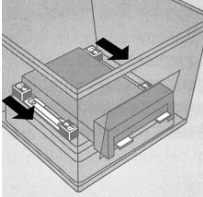
| <i>Film format</i> | <i>Image/Emulsion transfer</i> | <i>Slide copies</i> | <i>Color Applications</i> |
|---------------------------|---------------------------------------|----------------------------|----------------------------------|
| 3 1/4 x 4 1/4 pack film | <i>FP100C</i> | <i>FP100C</i> | <i>FP100C</i> |
| 4 x 5 pack film | | | |

Assembling the Daylab 35 Plus

After preparing the film holder and loading the film, assemble the Daylab 35 Plus as follows:

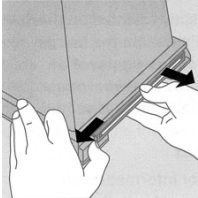
STEP 1 Attach your film holder to the film-holder base (g). **Step 1** is required only when using the 4 x 5 or 8 x 10 film-holder base. If using the 3 1/4 x 4 1/4 base, proceed with **Step 2**.

4 x 5 base: Attach the Model 545, 545i or Pro to the base. Turn the base upside down so the two sliding metal bars with the "lock" and "unlock" symbols are in view. Slide both bars as far as they will go in the "Unlock" direction. Place the film holder over the opening between the bars as shown in the illustration below.



Be sure that the side of the film holder with the dark slide or focusing panel (f) faces this opening. With the film holder in place, slide the bars back to the "lock" position, in the direction indicated by the arrows in the illustration. When the film holder is properly mounted, the bars fit into the grooved edges of the film holder, securing it to the base.

8x10 Base: For use with Polaroid 8 x10 in. film. This base accepts a Polaroid Model #81-06 Film Holder.



STEP 2 Attach the enlarger head (a) to the film-holder base (9).

3 1/4 x 4 1/4 Base: Align the assembly fittings (e) on the sides of the enlarger head with the assembly locks on the base. When properly mounted, the enlarger head rests **securely** on the base.

4 x 5 and 8x10 bases: As shown in the illustrations below, orient the base so the previewing door (n) faces you and you can access the film-holder opening (4 x 5 base) or slot (8 x 10 base) from the **right** side of the base. Then, holding the enlarger head so the controls are facing you, place it upon the base so the assembly fittings match the fittings on the base.

STEP 3 Plug the power supply (d) into an appropriate electrical outlet and then into the connection on the **back** of the enlarger head.

Film Processing time

Processing times vary for different film types. Also, temperature affects the processing time of your film. Check your film instructions for the recommended processing time. **Note:** When you make image transfers, the film requires a different processing time. For recommended processing times, refer to the Creative Uses Guide included with your system.

Preparing to make an enlargement

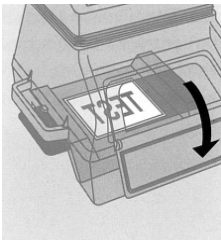
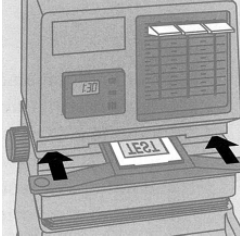
Select a slide: The Daylab 35 Plus allows you to add creative effects to your slides, but it cannot improve the photographic quality of your original image. Choose a clean, dust-free 35mm slide that is in sharp focus, has an even exposure (neither too light nor too dark) and accurately renders your subject's colors.

Orient your slide on the slide carrier: Holding the slide carrier (l) with its long edge facing you (the guides that hold the slide in place face upward), lay your slide -side-up (dull-side-up) on the emulsion carrier so that

it fits within the guides. Be sure to orient the slide on the carrier so the image is **upside down** and appears as a **mirror image** on the focusing panel or dark slide.

Compose your picture: With the slide correctly oriented, insert the slide carrier into the slide carrier slot (see illustration below).

Set the VIEW-OFF-PRINT switch (1) to VIEW: the viewing light inside the enlarger head should now be on.

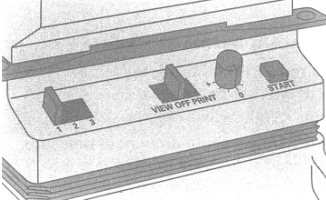


Open the previewing door (n) to view your image projected onto the white focusing panel or dark slide of the film holder (as shown) Notice that the slide carrier does **not** lock into position in the slide carrier slot, allowing you to move it in any direction to crop and center the projected image For more information on composing your picture, see *Tips for better enlargements* on page 8 of this manual.

Focus your picture: As you view the image projected on the dark slide, turn the cropping and focusing control (c) on either side of the enlarger or reduce the image to a head to enlarge desired size. Raising the enlarger head enlarges the image; lowering it reduces the image. To bring the image into sharp focus, slowly reverse the direction that you turned the cropping and focusing control when you cropped the image, until the image is focused. Caution: After bringing your image into sharp focus, be sure to close the previewing door. Leaving the previewing door open while you expose the film fogs (ruins) the print.

Setting the Exposure Controls

On the front of the Daylab 35 Plus enlarger head are the four controls (see illustration below) that let you set an exposure time and make an exposure: the automatic exposure switch (m), the VIEW-OFF-PRINT switch (l), the manual exposure adjustment dial (k) and the START button (j).



The Daylab 35 Plus has a built in exposure sensor that measures the density of your slide and automatically sets the intensity of the electronic flash. Combining the functions of the automatic exposure switch and the manual exposure adjustment dial, you can fine-tune the exposure of your print.

The automatic exposure switch (m) You can choose from three set exposure times.

Setting 1: For use with Polaroid 8 x 10 ER instant film.

Setting 2: For use with Polaroid types 3x4 inch Type 669 film, 4x5 inch Type 59 sheet film, 4x5 inch Type 559 pack film, 3x4 inch Type 665 P/N

Setting 3: For use with Polaroid 3x4 film Type 689 and Pro 100 color film.

The VIEW-OFF-PRINT switch (i); With three settings: VIEW, OFF and PRINT, use this switch to select the proper light source as you compose an image on the darkslide/focusing panel or as you print an image.

VIEW: Select VIEW to compose an image on the dark slide focusing panel. This setting activates the lamp that illuminates your image onto the dark slide. *Note:* With VIEW selected, you cannot preview the effects of any color filtration on your projected image. *Caution:* Never leave your slide under the view lamp longer than necessary. **Heat from the lamp can damage your slide.**

OFF: After you compose and focus your image, return the switch to OFF until you make a print. This helps are ready to extend the life of the VIEW lamp. When you finish using the Daylab 35 Plus, return the switch to OFF.

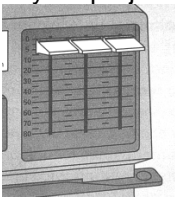
PRINT: Select PRINT when you are ready to make an exposure. As a safeguard to prevent accidental vibration of the unit, the activation of the flash that exposes the film is delayed for a second after you press the Start button (j). This eliminates any chance of vibration that can cause unsharp images.

The manual exposure adjustment dial (k): Use the manual exposure adjustment dial to override the three automatic exposure settings. The dial lets you make exposure corrections to your prints and has an exposure-correction range with seven settings. Use the "0" setting at the midpoint of the range when no exposure correction is needed. If you are making an enlargement of a **properly exposed** slide, use the "0" setting as your starting point. You can either add or subtract exposure time from the "0" setting. Adjusting the exposure by one line on the dial is equivalent to 1/2 f/stop. The dial lets you add or subtract up to 2 1/2 f/stops. Turning the dial from "0" clockwise in the "+" direction lets you increase the exposure to lighten your printed image. Turning the dial from "0" counterclock-wise in the "-" direction lets you reduce the exposure to darken your printed image. For more information see *Possible problems, causes* on page 7 of this manual.

The START button (j): The red START button activates the automatic exposure sensor and the printing light which exposes the film. **Note:** Only a slight amount of pressure is needed to activate the START button. By using a light touch, you also minimize the possibility of moving the enlarger head and blurring the image. **Caution:** When you are ready to make an exposure, be sure to close the previewing door (n). **If you leave the door open, you will fog (ruin) your print.**

Setting the Color Filtration Controls

On the front of the enlarger head are three color filtration controls (h), allowing for color correction to your projected image (see illustration below).



The Daylab 35 Plus enables you to adjust the color balance of your enlargement by adding amounts of the three primary colors: cyan, magenta and yellow (singly or in combination) to your print. The filters are scaled so you can measure the amount of filtration for each color. Use "0" for no filtration Or, increase the filtration by increments of "5", up to "80," the maximum filtration level. As you evaluate the color balance of your image to determine what correction it may need, first select a portion of the image that should be **neutral or gray** to detect any undesirable color cast Whenever possible, look also at **skin tones** for improperly balanced color. To **eliminate** the undesired color cast from your image, you will need to add filtration for that color's complement (for color correction, refer to the chart on the next page).

In color photography, light is broken down into three primary colors: cyan (greenish blue), magenta (reddish purple) and yellow. By pairing these colors in equal amounts, you can create the following secondary colors:

CYAN + MAGENTA = BLUE
MAGENTA + YELLOW = RED
YELLOW + CYAN = GREEN

To add a certain color to your printed image, you must either add that same color with filtration or decrease its complement. Use the chart below to determine what filter or combination of filters you need to correct your image.

Correcting prints from color slides

If you want:

Less YELLOW
 Less RED (MAGENTA + YELLOW)
 More RED
 Less MAGENTA
 More MAGENTA
 Less BLUE (CYAN + MAGENTA)
 More BLUE
 Less CYAN
 More CYAN
 Less GREEN (YELLOW + CYAN)
 More GREEN

add:

CYAN + MAGENTA
 CYAN
 MAGENTA + YELLOW
 YELLOW + CYAN
 YELLOW + CYAN
 YELLOW
 CYAN + MAGENTA
 MAGENTA + YELLOW
 CYAN
 MAGENTA
 YELLOW + CYAN

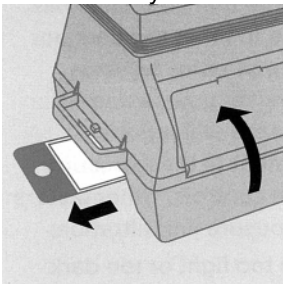
or

subtract:

YELLOW
 MAGENTA + YELLOW
 CYAN
 MAGENTA
 MAGENTA
 CYAN + MAGENTA
 YELLOW
 CYAN
 MAGENTA + YELLOW
 CYAN + YELLOW
 MAGENTA

Making a Picture

- 1 Slide the automatic exposure switch (m) to the setting appropriate for the type of film you are using.
- 2 Set the manual exposure adjustment dial (k) at the setting appropriate for your slide. For a slide image with average lighting conditions, start with the "0" setting.
- 3 Set the VIEW-OFF-PRINT switch (l) at PRINT.
- 4 If you are printing onto **color** film, set the color filtration controls (h) all to the zero setting to start. Most slides will print well with no filtration. If printing onto **black-and-white films**, you should initially set the three-color filtration controls to "0" You can, however, use filters to add or subtract tonal values for black-and-white prints.
- 5 in order to expose the film, first close the previewing door (n). Then pull the dark slide or focusing panel (f) as shown below, following the directions that apply to the film holder and film holder base you are using.



The Daylab 35 Plus, mounted on the 3 1/4 x 4 1/4 base 3 1/4 x 4 1/4 base.

3x4 Base: Gently pull the dark slide out **as far as it will go**.

4 x 5 Base: Remove the white viewing object you have chosen and place a single sheet of film in the holder. Then, following the instructions in the film holder instruction manual, continue with the film exposing process by pulling out the negative envelope of the single sheet of film.

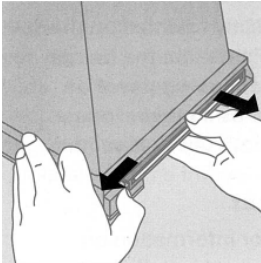
8 x 10 Base: Gently pull the dark slide **all the way out of the film holder**.

Caution: To steady the Daylab 35 Plus as you remove the 8 x 10 dark slide, grip the enlarger head handle on the left side of the Daylab 35 Plus (the side opposite the side of the dark slide). **Do not** try to steady the Daylab 35 Plus by placing your hand **on top** of the enlarger head as you can lose your cropping and focusing settings.

6 Press the START button (j) to expose the film. **Press the button gently.**

7 After exposing the film, gently insert the focusing panel or dark slide (f) back into the film holder, as far as it will go.

8 x 10 base: After inserting the dark slide into the film holder, remove the film holder from the base. With your left-hand thumb, release the locking device as shown in the illustration below. At the same time, grip the film holder with your right hand, as shown, and pull the film holder out of the base.



Processing the Film

To process the film, follow the instructions that come with your Polaroid film holder. Wait the required processing time. Continue processing the film as directed in your film holder instructions.

Caution: The Polaroid instant film process uses a caustic paste. Avoid contact with skin, eyes and mouth and keep away from children and animals.

If you get some paste on your skin, wipe it off immediately and wash with water to avoid an alkali burn. If eye or mouth contact occurs, quickly wash the area with plenty of water and see a doctor. Keep discarded materials away from children, animals, clothing and furniture.

Possible Problems, Causes

The image is blurred, out of focus

Most likely causes are:

- An original slide not in sharp focus.
- Too much pressure applied when pressing the START button (j) to expose the print, causing the enlarger head (a) to vibrate or move.
- Altered focus settings from pressing on the top of the enlarger head (a) while pulling the dark slide/focusing panel (f) out of the film holder.

The print is blank

Most likely causes are:

- Forgetting to press the START button (j) to expose the film.
- Forgetting to move the VIEW-OFF-PRINT switch (l) to PRINT before pressing the Start Button(j) to expose the film. (No exposure will have been made)
- Leaving the previewing door (n) of the film-holder base (g) open while pressing START(j) to expose the film.
- Leaving the focusing panel/dark slide (f) inserted in the film holder while making an exposure.
- While using a Polaroid Model 545i or Pro Film Holder (for 4 x 5 in. sheet film), the negative came out with the cover. Make sure the sheet is pushed all the way into the holder. If the holder is bent or has matter jammed inside, it may not be able to grasp the negative.

The print is too light or too dark

Most likely causes are:

- An original slide over- or underexposed. The Daylab 35 Plus cannot enhance an improperly exposed original image.
- An over- or underexposed print. If the print is overexposed, decrease exposure with the manual exposure adjustment dial (k) by -1 or more depending on the severity of the overexposure. If under-exposed, increase exposure with the manual exposure adjustment dial by +1 or more depending on the severity of the underexposure. If the print is severely underexposed, you may need to increase exposure by selecting a higher setting (setting 2 or 3) with the automatic exposure switch (m) or possibly expose the print more than once.

The image printed backwards: The slide is incorrectly oriented on the slide carrier (i). Be sure that the **image projected on the focusing panel or dark slide** appears as a **mirror image** of what you want for your final print.

Lamp replacement: Contact Daylab for information on replacement lamps and installation.

Other film-processing problems For other problems specifically related to film processing: **black edges, missing corners, spots or streaks on your prints, see your film holder instructions for possible causes. A frequent cause of film-processing problems is dirty rollers. Inspect the film rollers in your film holder frequently and keep them clean. For further assistance, call Polaroid Corporation toll-free at 1- 800-343-5000**

Tips for better enlargements

Composition and cropping: By repositioning the slide carrier (i) in the slide carrier slot, you have control over cropping an image as you compose a picture. When you preview the projected image on the white focusing panel (f), you can move the slide around to center the projected image on the any portion focusing panel. To crop out a portion of the image, raise the enlarger head. You can also project a full frame image of your slide. Also, you can change the orientation of an image by rotating your slide 90 degrees on the slide carrier. *Note:* When using the 31/4 x 41/4 base, you cannot print the full format of your 35mm slide. As you zoom the uncropped image of the slide, you lose approximately 1 /16 in. from the horizontal dimension of the image.

Using more than one slide at a time: You can also use the Daylab 35 Plus to print a single image from two slides. Remove the two 35mm slide transparencies from their original mounts, lay one slide on top of the other, and align them carefully to compose your picture. Then, place the slides together in **a single** mount to keep the image properly aligned. The Daylab 35 Plus automatically adjusts the exposure to compensate for the second slide. Remember, however, that you can fine-tune the exposure by overriding the automatic exposure setting with the manual exposure adjustment dial (k).

WARRANTY

Your Daylab 35 Plus is guaranteed against defects in materials and workmanship for one full year from the date of original purchase. During this period, any such defects will be remedied without charge, except for transportation costs. The warranty excludes damage resulting from normal wear, mishandling or accident, and a charge will be made for such repairs. The warranty excludes light bulbs and the timer battery. **This warranty excludes consequential damages.**

To order Daylab 35 Plus parts or accessories, call Daylab at 1-800-235-3233

| <i>Item</i> | <i>Order number</i> | <i>Description</i> |
|--|---------------------|---|
| Daylab 35 Plus Multifomat Slide Enlarger With 4x5 base | 114725 | Complete slide-enlarging system with 4 x 5 Base |
| Daylab 35 Plus Multifomat Slide Enlarger without base | 122139 | Complete slide-enlarging system but without a base |
| Daylab 35 Plus Multifomat Slide Enlarger with 3 x 4 base | 122140 | Complete slide-enlarging system but with 3 x 4 base |

| | | |
|--------------------------------|--------|---|
| Daylab 3 1/4 x 4 1/4 Base | 101371 | Compatible with all Daylabs |
| Daylab 8 x 10 Film-Holder Base | 619456 | Compatible with Daylab 35 Plus, II and 300 models |
| Daylab 4 x 5 Base | 619457 | Compatible with Daylab 35 Plus, II and 300 models |

Note: All film holders & accessories above are interchangeable with the Original Daylab II

Daylab System Specifications

These specifications are for the standard Daylab 35 Plus enlarger head and 4x5 film-holder base.

Weight & Dimensions

Weight: 8 lbs.

Height (minimum magnification): 16 in. Height (maximum magnification): 20 in.

Length: 10 in. Width: 10 in.

Lens

Built-in, non-removable, 35mm, f/3.5, 4 element: automatically stops down to f/5.6 for printing

Power supply

PS 115 Standard 115 VAC to 12 volt DC power supply also available: PS 220 to 240 VAC to 12 volt DC or PS 100 VAC to 12 volt DC

Built-in Filtration

Built-in cyan, magenta and yellow filters: color correction adjustable from 0 to 80 cc units in color density

Exposure control

Automatic sensor, manual override; control provides 5 f-stop range (+/- 2 1/2 f-stops)

Exposure system

Built-in electronic Flash exposure system is automatically controlled based on density of slide, subject to manual override

ISO settings

Three-speed switch for:

1 Polaroid 809 ER film (80 ISO)

2 Polaroid types 669, 559, 59, 665 B&W P/N

3 Polaroid Types 689, Polapan 100 B&W & Polacolor Pro 100 & Time Zero/SX-70

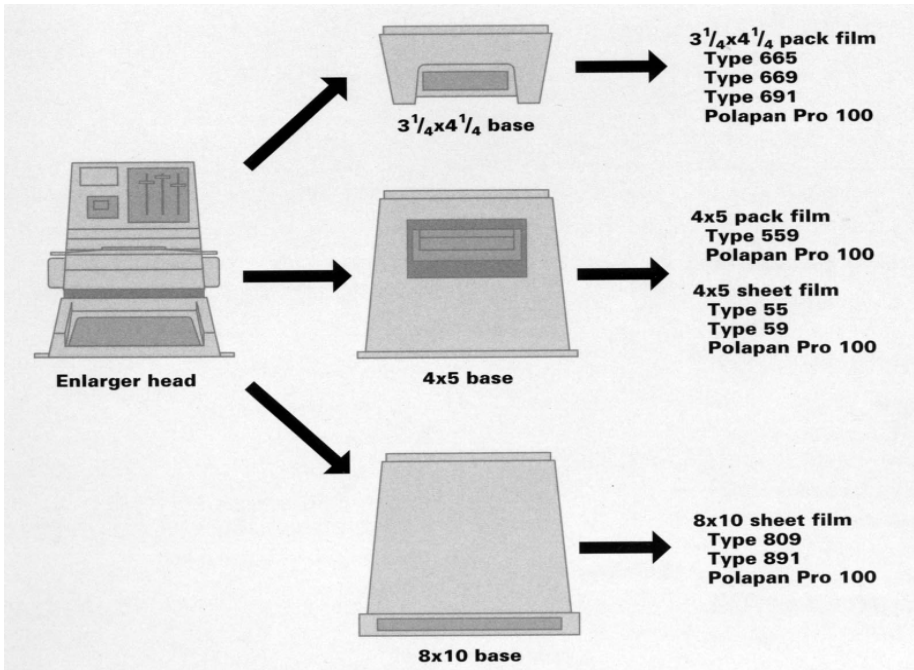
Magnification Ranges

3 1/4 X 4 1/4 base 54 % enlargement capability

4 x 5 base: 60 % enlargement capability

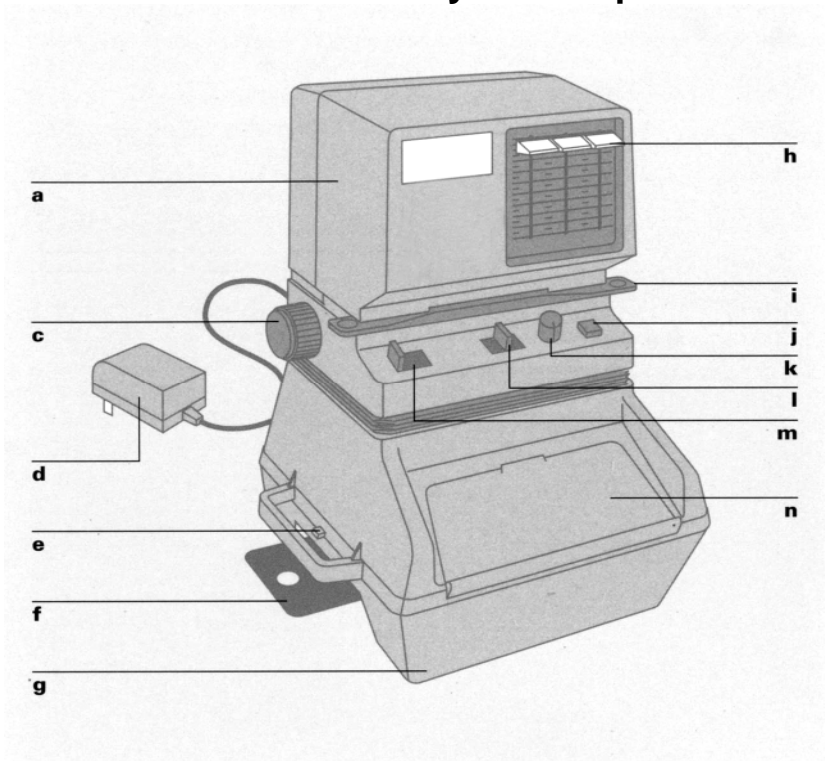
8 x 10 base: 78 % enlargement capability

The chart below lists the Polaroid instant films that are compatible with the Daylab 35 Plus film-holder bases. (For recommendations on what films are appropriate for specific applications, refer to the chart on page 3 of this manual.) Note: The bases shown below for 4 x 5 in. and 8 x 10 in. films are available as accessories. For a complete listing of Daylab 35 Plus accessories, see page 10 of this manual.



The Daylab 35 Plus enlarger head mounted on the 3 1/4 x 4 1/4" film-holder base

Daylab Components



- a Enlarger head
- c Cropping and focusing control
- d Power supply
- f Dark-Slide
- g Film-holder base
- h Color filtration controls

- i Slide carrier
- j START button
- k Manual exposure adjustment dial
- l VIEW-OFF-PRINT switch
- m exposure switch

- n Previewing door

Daylab
Phone 951-304-3381
www.daylab.com