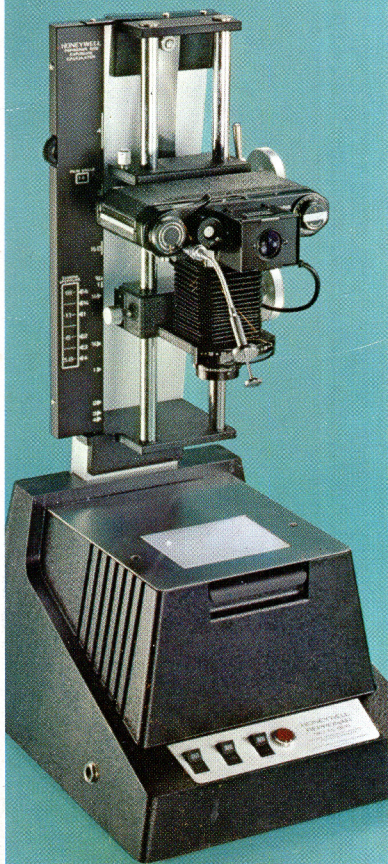


**how to use
your
Honeywell
Repronar
Model 805**



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Contents

the Repronar 805

Description

The Honeywell Repronar 805 is an easy-to-use 35mm slide duplicator and much, much more. It offers exciting creative possibilities ranging all the way from captioning and cropping to color enhancement and avant-garde superimpositions. Color shifts and disappointing exposures are often easily remedied. Besides permitting more control over final results, using the Repronar is normally much faster and more economical than having an outside laboratory make the duplicates. With imaginative application, the Honeywell Repronar can easily become the most useful photographic tool in the laboratory, studio, home or office.

The Repronar consists of a special purpose camera, an easel with slide and filter holders, and an electronic-flash light source with high and low output control, an incandescent light source for viewing the transparency copies, and an adjustable Exposure Calculator.

The special purpose 35mm camera is a single-lens reflex type with a high quality f/4 Takumar preset copy lens designed specifically for this application. It features a rapid film advance lever and film rewind crank. A shutter-cocking device permits multiple exposures. Both the camera and the lens carriage move smoothly on a helical rack to vary the magnification and to achieve sharp focusing. A ground glass permits direct viewing for composition, and a magnifier lens assures critical focusing for sharp, clear copies. Extension bellows adjust for copies of any degree of magnification from 4X enlargement to 1/2X reduction of the original color transparency.

An adjustable Exposure Calculator indicates the proper exposure for the magnification selected. Exposure will depend on two variables, the aperture selected, and the position of the power switch. The built-in electronic flash unit has a high-low switch in the base which permits a 4X light ratio.

When set at the LOW position, the power output will be the same as the previous models. When the switch is set at HIGH, you will have four times (two f/stops) the amount of light at your disposal. The selection of the proper aperture for a particular film when exposing at a certain magnification is simplified with the use of the Exposure Calculator.

Accessories to be made available will be the bulk load film magazine, a motor drive assembly, an easel for the making of film strips and an easel for the copying of film strips.

Completing the copy setup is an easel for positioning transparencies to be copied, and a view light for illuminating them while composing and focusing.

With the Repronar, the color photographer has, for the first time, the opportunity of experimenting, in color to achieve better pictures. A partial list of the processes which can be performed with the Repronar follows:

Duplicate color slides

Crop and enlarge

Enlarge 16mm movie frames to 35mm

Enlarge 35mm stereo frames to 35mm

Reduce 2¼ -inch slides to 35mm

Correct underexposure

Correct slight overexposure

Correct color balance

Correct "distortion"

Add or subtract overall color

Frame with masks

Dodge for exposure control

Experiment with vignettes

Create montages

Tilt for composition

Improve portraits

Add textures and screens

Create titles

Create sandwich effects

Produce filmstrips

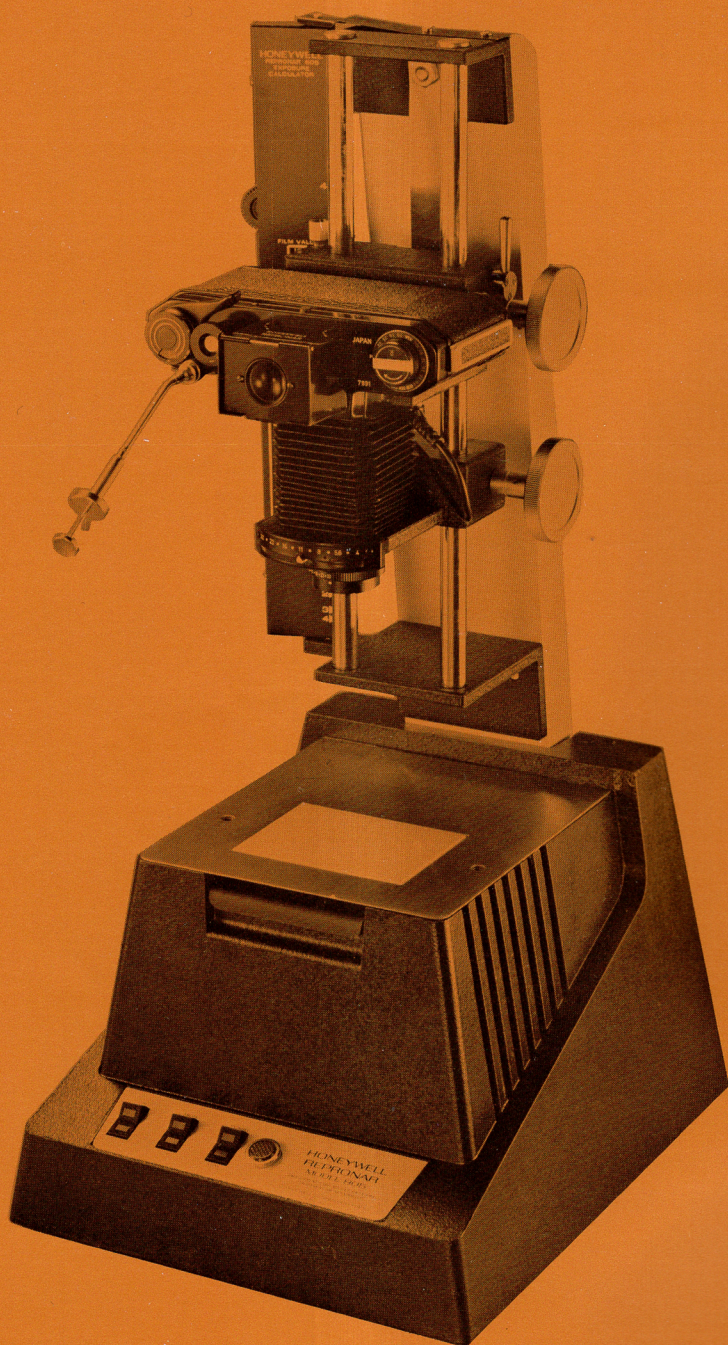
Duplicate filmstrips

Produce black-and-white negatives from color slides

Produce color negatives from color slides

Produce color slides from color negatives

Produce black-and-white slides from negatives or color slides



Operation of the Repronar Model 805

Preparation

NOTE

Before starting your reading, remove and unfold the Repronar Nomenclature from the back flap of this booklet. The Nomenclature is your guide to all of the parts of the Repronar which are identified by number in the text.

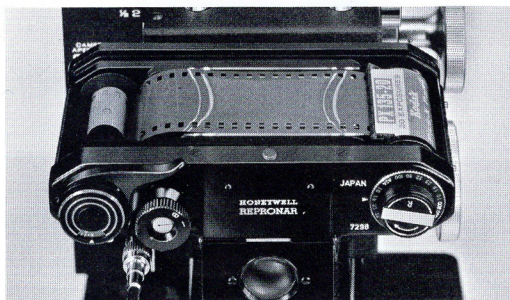
To prepare the Repronar 805 for use, set it on a table with the camera's ground glass viewer approximately at eye level. Be sure that the shutter knob (32) is in "I" position. If not, pull the knob toward you, rotate it to align the "I" and the black line and then release the knob.

If the outlet to be used provides 110-125 vac, the Repronar may be plugged in. If the voltage is different, refer to the label on the base of the Repronar for wiring changes before plugging in the power cord.

Loading the Film

Follow the simple steps outlined below:

1. Pull the camera case latch (4) forward and remove the back of the camera.
2. Pull out the rewind knob (59) and insert the film cassette in the cassette chamber. Push in the rewind knob. Draw out the film leader and insert it in the slit of the takeup spool. Note that the film is wound under the take-up spool, and not over as in some 35mm cameras.
3. Make sure the double exposure button (49) is pushed to the left.
4. Turn the film advance lever (24) until the sprockets (62) engage the perforations in the film.
5. Close camera case and fasten the latch.
6. Before advancing the film again, slowly turn the rewind knob clockwise until a slight resistance is felt. This prevents loosening of the film in the cassette.



7. Turn the film advance lever a full stroke and trip the shutter, watching the rewind knob. Repeat. The rewind knob should turn counter-clockwise, indicating that the film is moving from the cassette to the takeup spool.
8. Set the film index window (34) at the proper number for the film. Refer to the table on page 9 for this number. If the film loaded is one that requires filtering, pull out the filter compartment (16) and place the appropriate filter on the glass. The table on page 9 also gives the filter requirements for each film, if any.

9. Advance the film a third time. The exposure counter (48) will show #1. The Repronar is now ready for the first exposure.

Follow the simple steps outlined below:

1. Set the *on-off* switch (15) in *on* position.
2. Push the *flash-view* switch (13) to *view* position.
3. Be sure the film has been advanced and the shutter cocked before focusing and composing the transparency.
4. Open the diaphragm for maximum illumination on the ground glass viewer by setting the aperture selector (18) to f/4.
5. Place the positive transparency, with emulsion or dull side down, in the slide holder (42 or 55) on the easel. The transparency, properly placed in the slide holder, will appear as originally taken. Color or black-and-white *negatives* should be placed in the slide holder with dull (emulsion) side up.
6. Loosen the lens carriage locking screw (29) and align the lens carriage pointer (28) with the desired magnification on the lower magnification scale (44). Tighten the locking screw.
7. Loosen the camera carriage locking lever (5) and rotate the camera travel knob (6) to bring the camera carriage pointer (31) to the same indication on the upper magnification scale (47). The camera is now roughly focused, use the magnifier (1) and lens carriage travel knob (7) for sharp focusing. Then tighten the camera carriage locking lever (5).
8. Compose the copy by moving the slide holder on the easel.
9. Increase or decrease the magnification if desired by repeating steps 6 through 8. Tighten the camera carriage locking lever.
10. Read the proper f/stop on the camera aperture bar (45). Set the diaphragm ring (20) to the proper f/stop. Then move the

Operating Sequence

aperture selector (18) from right (f/4) to the left until a resistance is felt. This two step aperture control allows the operator to reopen the diaphragm for a focus or position check using the aperture selector, then close back down without taking his eye away from the ground glass. The filters recommended for color films were considered in calibration of the exposure scale and additional compensation is not necessary.

11. Push the *flash-view* switch to *flash*.
12. Depress the shutter release (23).
13. Turn the film advance lever (24) a full stroke to advance the film and cock the shutter for the next exposure.

Unloading the Film

1. After the final exposure has been made, the film advance lever will not make a full stroke. Don't force the advance lever or the film will be pulled out of the cassette.
2. Depress the film rewind release button (41) and unfold the rewind crank (3) to wind the film back into the cassette. Turn the rewind crank at a smooth, even rate — not too rapidly.
3. Continue turning the rewind crank until you feel the tension release as the end of the film slips off the takeup spool. The crank then turns freely.
4. Remove the camera back, pull out the film rewind knob, and remove the cassette of exposed film.

Inserting the Filters

The proper use of filters is important in the Repronar system. Previous models of the Repronar were supplied with two glass filters. These were UV-17 and the 81A filters. Because of changes in films, these filters are no longer sufficient to cover the large selection of films that are presently available. For this reason we are no longer supplying filters. Suggested starting points for filtration are given in the following table. Light Balancing

gelatin filters which can be purchased in 3" squares from firms such as Eastman Kodak can be inserted into the filter holder. Use the filters of your choice together with the clear glass filter in the filter holder.

Film	Power Posi- tion	Film Value	Filtration Starting Point
Kodachrome II	LO	14	81EF
Kodachrome X	LO	20*	81B
Ektachrome X	LO	20	2B
High Speed Ektachrome	LO	20**	81EF & 81C
Agfachrome	LO	16	81B
Ansco Dupe Film #5470	LO HI	6 14	85N3
Kodacolor X	LO	14	None
Ektacolor S	LO	18	None
Kodak Panatomic X (Neg.)	LO	18	None
Kodak Panatomic X (Pos.)	LO	20	None
Kodak High Contrast Copy For Making Positives From Negatives	LO	16	None
Ansco Versapan	LO	20	None

*close down 1/2 stop more than indicated on the camera aperture bar (45).

**close down 1 stop more than indicated on the camera aperture bar (45).

Each Film Value represents 1/4 f/stop. Therefore, the difference between LO and HI is equal to 2 full f/stops, or 8 quarter stops (Film Values). Film will vary in color balance and speed from one emulsion batch to another. Slight color shifts are also experienced because of processing differences between processing labs. Day-to-day variations also can be experienced within the same lab. Since there are so many variables, these film values and suggested filters should be regarded as starting points. If exposures or colors are consistently off in the same direction, appropriate adjustments should be made.

**Recommended
Repronar Settings
for Various Films**

How to Use the Repronar as a Photographic Tool

Duplicate Color Slides

Using the Repronar as a photographic tool offers endless possibilities in achieving spectacular and interesting effects. The techniques listed on page 3 are explained here; others will be found through working with the Repronar.

To make a 1:1 duplicate from a color slide, set the lens carriage pointer opposite "1" on the lower magnification scale (44) and frame the image in the ground glass viewer. The viewer shows the image that will appear on the film; there is no need to allow any extra space for the original mount or border that might spoil the picture. Frame the image in the viewer so that the border or mount is not visible. If the original transparency appears to be of normal exposure, use the f/stop indicated on the Exposure Calculator. If the original appears to be underexposed, to obtain a similarly underexposed copy open the diaphragm one f/stop for each apparent f/stop of underexposure. If the original appears to be overexposed, to obtain a similarly overexposed copy close the diaphragm one f/stop for each apparent f/stop of overexposure. You must make additional compensation if the exposure

is to be corrected. The procedures for correcting over and underexposure are explained on pages 13 and 14.

Cropping and enlarging may strengthen and greatly improve the composition of a transparency. This technique also eliminates distracting or undesirable areas from a photo. In addition to enlarging a portion of a transparency, you may enlarge a 35mm stereo frame or a frame of 16mm movie film to 35mm. Use a magnifying glass to help select a 16mm frame that is clear and sharp, suitable for copying.

The Repronar permits enlargements up to 4 times the original copy size. Select the magnification which suits your purpose. Try some portraits, too; or the enlargement like the one on this page which was made from the original above. The quality of enlargements in general depends upon the sharpness, film grain, and other qualities of the original copy. *For best results, make enlargements from originals that are of good quality.* An enlargement of 4X magnification requires an original transparency of excellent quality.

Crop and Enlarge



Reduce 2¼" Slides to 35mm



Correct Underexposure



Set the lens carriage pointer opposite $\frac{1}{2}$ on the Exposure Calculator to reduce a transparency made on 2¼ by 2¼-inch film to 35mm. Then adjust the degree of reduction as you select a horizontal or vertical format for the copy.

Under "Duplicate Color Slides" it was recommended that the diaphragm be opened one f/stop for each apparent f/stop of original underexposure when *copying* an underexposed original. To *correct* an underexposed original, open an additional f/stop for each apparent f/stop of underexposure. The rule then for correction is "estimate the number of f/stops of original underexposure and open up twice as many f/stops when making the corrected copy."

Example: The original appears to be one f/stop underexposed; the Exposure Calculator reads f/11 for a normal exposure. To *copy*: set the aperture selector at f/8. To *correct*: set the aperture selector at f/5.6.

If the original is unusually dark, bracket the estimated exposure by one or two f/stops in each direction. If exposure beyond f/3.5 is required, remember that you may repeat the exposure one or more times. In the above example, you could have used an aperture setting of f/11. Two exposures at f/11 would equal f/8, or four exposures at f/11 would equal f/5.6.

Under "Duplicate Color Slides" it was recommended that the diaphragm be closed one f/stop for each apparent f/stop of original overexposure when *copying* an overexposed original. To *correct* an overexposed original stop down an additional f/stop for each apparent f/stop of overexposure. The rule then for correction is "estimate the number of f/stops of original overexposure and stop down twice as many f/stops when making the corrected copy."

Example: The original appears to be one f/stop overexposed; the Exposure Calculator reads f/11 for a normal exposure. To *copy*: set the aperture selector at f/16. To *correct*: set the aperture selector at f/22.

If the original is more than one f/stop overexposed, the resulting copy may appear muddy — there is too little color in the original to make a satisfactory copy. However, filters added to the overexposed originals may produce some unusual pictures. Use an orange filter, for example, to make a sunset effect when copying an overexposed, mid-day photograph. When using an additional filter, consider the filter factor in determining the f/stop. A filter with a factor of 4, for example, effectively reduces the exposure by 2 f/stops.

Color Balance and Correction



Warm Color Balance
exposed with 20Y filter



Normal Color Balance
exposed without extra filters



Cool Color Balance
exposed with 10M and 10C filters

Incorrect color balance in the original can be greatly improved in the duplicate by careful use of a 3" by 3" gelatin color compensating filter set. These filters are colored cyan, magenta or yellow and each is numbered and lettered to indicate its color and strength. A 30C filter, for example, is very cyan while, a 5Y is faintly yellow. A good kit consists of a 5C, 10C, 20C, 30C, 5M, 10M, 20M, 30M, 5Y, 10Y, 20Y and 30Y filters. The chart below shows just the basic colors that can be created using this kit. Many more hues and tones are possible.

When using these filters, remember that they are in addition to the basic filters that your film may require, as specified on page 9.

ADDING COLOR

To add:	use:
Red	Yellow and Magenta filters
Green	Yellow and Cyan filters
Blue	Magenta and Cyan filters
Yellow	Yellow filters
Cyan	Cyan filters
Magenta	Magenta filters

REMOVING COLORS

To remove:	use:
Red	Cyan filters
Green	Magenta filters
Blue	Yellow filters
Yellow	Magenta and Cyan filters
Cyan	Yellow and Magenta filters
Magenta	Yellow and Cyan filters

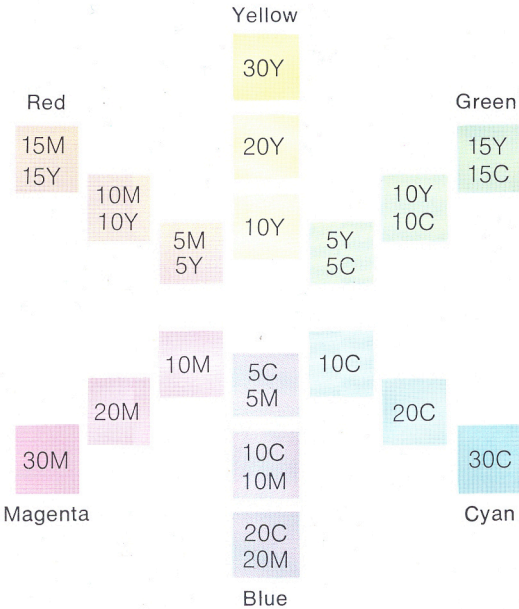
To add a particular color, use a similarly colored filter or combination. To remove a color, the complementary color filter or combination is used, as seen on the chart.

The chart or the instructions above tell which filters to use for a particular effect, but not how much. Since the stronger filters have more effect, you might use a 20M and 20C combination to correct a very yellow original. But to add a slight reddish color to another transparency, you might try a 5Y and 5M combination. Since color is often a matter of personal preference and the "best" overall color may vary with the subject matter, it's wise to

make a visual check, using the viewing light and look at the effects of several combinations.

When adding color compensation filters, the exposures must be increased by one f/stop for every 30 units of filtration added. If a 20Y and 20C combination is used, open the diaphragm 1 1/3 stops more than indicated on the exposure scale. If a 10M and 10C combination is used, the normal exposure should be increased by 2/3 of a stop. A 30Y requires one extra f/stop of exposure. The exposure adjustment required by the filters is determined by adding up their numbers, and has nothing to do with the colors used.

As you become familiar with the results of these filter combinations, your demands may become more precise. Mixing various strengths of these filters puts the full spectrum at your disposal. However, to get very exacting results, an extremely consistent processing lab must be used, and film from the same emulsion batches should be used whenever possible, too.

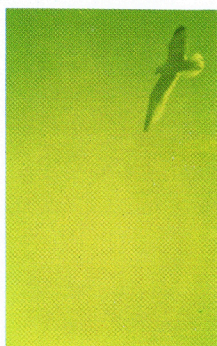


Magenta colored original, loosely cropped and under-exposed.



Duplicate made with 20Y and 20C filters, cropped tighter and exposure opened up two stops past indicated f/stop to compensate for filters and correct underexposure.

Add Overall Color Tint



Contrast Control



Original transparencies are often enhanced by the addition of colored filters. Try adding a blue filter to a picture of a snow scene. Use a blue filter also to create a moonlight effect. Add red or orange to a sunset for more intense colors. Be sure to consider the filter factor and compensate in the exposure when introducing filters into the Repronar system.

There is a tendency for duplicates to have slightly more contrast than the original. Using higher contrast films, such as Kodachrome II, emphasizes this effect somewhat. Underexposing and overdeveloping the film boosts contrast noticeably, depending on the amount of underexposure and overdevelopment. Check with your processing lab to find out which films he can overdevelop. To reduce contrast, overexpose the film and have it underdeveloped. Here again, ask your processing lab which films he can underdevelop. Increasing and reducing contrast by these methods may require additional filtering to offset color shifts in the processing. This depends on the film used, the processing lab and the amounts of exposure and development variance. For predictable results, records should be kept each time this is done.

The technique of dodging permits control of the exposure of certain areas within a transparency. Hold the dodge up near the lens and out of focus to eliminate an area of the original from the copy. In the same manner, but using the multiple exposure technique, dodge an area while the remainder is given additional exposure (see page 19 for multiple exposure).

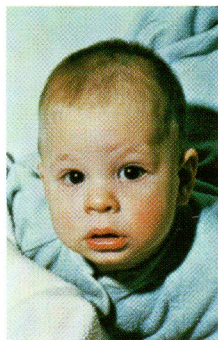
Use a vignette to transform a cluttered picture into an interesting or dramatic portrait. Or, combine two or more vignetted pictures onto one transparency using the multiple-exposure technique on page 19. As a rule, make a vignette to suit the original transparency and the result desired, and hold the vignette near the lens to be out of focus. For a multiple-exposure montage, arrange the copy by marking lightly with a grease pencil on the ground glass viewer. This will prevent overlapping or crowding as the exposures are made.

To obtain the effect shown in the portrait, use a mask made of zinc oxide on a square of clear acetate film or clear glass. Coat one side of the acetate with the ointment; then wipe the center clear except for a thin film. The lightly-coated center serves as a diffusing filter; the heavier-coated area as a vignette. When using a vignette of this type, be sure to check the focus with the vignette in place. Then stop down to the indicated f /stop to see the actual effect in the ground glass viewer. When using an opaque, colored vignette, position it on supports. Set the I-B Selector on "B". Depress the shutter release (the electronic flash exposes the transparency) and hold it for sufficient time to permit the room light to expose the colored vignette.

A vignette made of zinc oxide on a clear acetate film was held up near the lens and out of focus to produce this subtle portrait.

Dodge for Exposure Control

Experiment With Vignettes



Create Montages



For an unusual and interesting effect, make a montage of two or more pictures combined in a single Repronar copy. Select the transparencies to be montaged, and expose first one and then the other. If the background on any of the slides is light, mask it so it will not wash out the image of the other slides. Where image areas overlap, remember the lighter one will dominate.

Other types of montages are interesting, too. Select one transparency and make a normal copy. For the second exposure, turn the slide over for a reverse image. Or, from one original make two or more magnifications on the same copy. As an aid in arranging the composition of a montage, use a grease pencil and lightly mark the ground glass viewer before making the exposures.

Add Textures



To obtain a transparency with a texture of woven canvas, place a handkerchief under the slide holder. Select a handkerchief of fine or coarse weave according to the magnification to be used for copying the transparency. Increase the exposure by $\frac{1}{2}$ or 1 f/stop to compensate for the cloth. Bracket the exposure to insure correct results. To create a dark lattice overprint effect, place a doily or screen over the original before duplicating.

Begin with a portrait focused on the ground glass viewer. While rotating the transparency on the easel, observe the various effects in the viewer. A great deal of impact can be added to an otherwise commonplace portrait. Try tilting other subjects in this way, too, for style and eye-catching interest.

Portraits taken at extremely close range usually result in undesirable distortions. Photograph your subject at a workable distance. Your subject will have a more natural, pleasing expression because the camera is not so distracting at the greater distance. Then, by cropping and enlarging with the Repronar, you overcome the distortion usually present in extreme close-ups. Besides just cropping and enlarging, try some of the other "Special Effects" possible with the Repronar — tilting, masking, or vignetting, or adding a texture or screen effect.

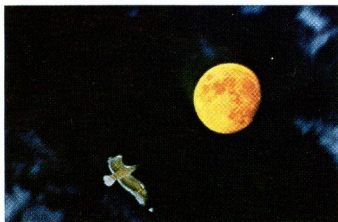
For sandwich effects, place two or more transparencies in the slide carrier, and copy as one slide. If the resulting combination appears darker than a normal transparency, open one or two f/stops to compensate in exposure. Bracket the estimated exposure by one f/stop in each direction to assure proper exposure.

Tilt for Composition

Improve Portraits

Create Sandwich Effects

Double or Multiple Exposure



The manner in which double or multiple exposures can be made is quite simple. On the front of the Repronar Camera, just below the shutter release button, there is a sliding chrome knob with the letter "D" on it (49). When this knob is in its normal position (to the extreme left), the camera will operate in its usual manner. To double expose, use the following procedure:

1. Make your first exposure in the usual manner.
2. Do not advance the film.
3. Slide the "D" knob to the right (in the direction of the arrow) as far as it will go.
4. Wind the shutter by turning the shutter cocking knob (32) in a clockwise direction. (When the shutter is cocked, the index mark on the shutter cocking knob will be in a horizontal position.)
5. The shutter is now cocked, ready for the next exposure.

When the "D" knob is pushed to the right, the film advance mechanism is disengaged. This allows the shutter cocking knob to be rotated without moving the film sprocket wheels within the camera. You will notice that the film advance lever cannot be moved when the "D" knob is pushed to the right. Also note that the exposure counter is activated only by the film advance lever. Double exposing will not cause the counter to advance.

After you have completed your double or multiple exposure, push the "D" knob to the left, then advance the film in the normal manner.

Create Titles and Captions

Titles and captions can be used to add clarity and a professional air to a slide presentation.

For a short title with black letters, use self-adhesive letters printed on clear background. (These are available in sheets — Zip-A-Tone, Artype, and others.) Arrange the letters for the title on a square of clear acetate film. Now place the title acetate under the transparency and copy on the Repronar.

For other titles, use a titling kit (such as those available for home movies and slides), paste-ups, or freehand letters. Photograph the title setup with high contrast black-and-white film (such as Micro-File Film) or color film. Select the film according to the color-combination desired. For example: to obtain white letters, (1) use black-and-white film to photograph a paste-up title of black letters on white background, or (2) use color reversal film or black-and-white positive film to photograph a paste-up title of white letters on black background. Be sure the resulting transparency has clear letters on a very dense background.

Now, add the title to the transparency. If the title is a clear film with black letters, lay it under the transparency and copy the two together. Note that the title and the transparency will be copied at the same magnification or reduction; therefore the size of the title must be pre-determined.

To add a title with white or light letters, use the double exposure method. The title slide should have a black background. Copy the original slide normally, then position the title slide so that the light letters will be exposed over a dark area of the first slide. Reduce the exposure by $\frac{1}{2}$ f/stops from the indicated exposure and double expose. With this method, the title need not be any exact size, as the title and the transparency are copied independently.

Correct Distortion

Distortion may be a disturbing factor in the original transparency. If the picture was taken with the camera tilted, the vertical lines at the sides of the frame tend to lean toward the center, and buildings appear distorted. This effect, if not too severe, can be eliminated in a Repronar copy. Tilt the original transparency on the opal glass until the distortion is corrected in the image on the ground glass viewer. Provide a support to hold the original and the slide holder in this position. If the original is a 35mm, notice that tilting shortens one dimension.

Set the lens carriage for the magnification which covers this shortened side, and focus on the mid-point of the copy area. For best results, use as small an aperture as practicable to provide the maximum depth of field for the tilted slide. Then use the multiple-exposure technique described under "Correct for Under-exposure" to obtain the proper copy exposure.

Adding distortion for emphasis may be desirable. Experiment to determine the interesting effects which may be obtained.

Frame With a Mask

Cut a mask to frame a picture — a heart or a keyhole, for example. Cut silhouettes for dramatic or comic effects. For a mask with sharp outlines, lay the mask over the original transparency. To obtain soft outlines for the mask, hold the mask up nearer the lens and out of focus. Be sure to check the focus with the aperture set for the exposure. Closing down the aperture may bring into focus the undesirable sharp edges. To obtain a colored mask effect, use colored paper and lay it on the original transparency (for sharp outlines) or on supports (for soft outlines). Set the I-B Selector on "B". Depress the shutter release (the electronic flash exposes the transparency) and hold it for sufficient time to let the room light expose the colored mask.

Black-and-White Films

In addition to the color films, black-and-white films may be used with the Repronar with rewarding results. Black-and-white transparencies with good, continuous tones are easily made from negatives, transparencies, (color or black-and-white). Negatives can be made from transparencies (color or black-and-white).

Of the many excellent black-and-white films available for the photographer, only two will be used to illustrate the capabilities of the Repronar. Other films and exposure-development combinations may be selected with equally good results. In general, the black-and-white films having an ASA speed number of 50 and lower give the best results. In black-and-white photography, some control in the processing gives better negatives (or positives). Exposure and development procedures are suggested here; but since the techniques of exposure and development of black-and-white films are matters of personal preference, you should make a few tests to determine the combinations which please you.

Black-and-White Negatives from Color Transparencies

Film: Kodak Panatomic-X.
Film Value: 18.
Recommended development: D-76 diluted 1:1,
5 minutes at 68°F.

Black-and-White Transparencies from Color Transparencies

Film: Kodak Panatomic-X.
Film Value: 20.
Recommended development: Kodak Direct Positive Developer Kit per instructions except: 1st Developer — 8 minutes; Final Wash — 10 minutes.

Black-and-White Transparencies from Kodacolor Negatives

Film: Kodak High Contrast Copy.
Film Value: 12.
Recommended development: Dektol diluted 1:1, 6 minutes at 68°F.

Black-and-White Transparencies from Black-and-White Negatives

Film: Kodak High Contrast Copy.
Film Value: 20. (Note: Because of variations of black-and-white negatives, this can only be an approximation.)
Recommended development: Dektol diluted 1:1, 6 minutes at 68°F.

Dust Cover



When not using the Repronar, protect it with the use of the dust cover, as shown in this photograph.

The components of the Repronar are of fine quality, especially designed for photographic service. This unit is precision engineered, and, like all good photographic equipment, will last a lifetime with normal care.

1. Both the Repronar and transparencies reproduced should be kept free of dust, lint, and fingerprints.
2. Clean the lens with a spray of air from an ear syringe, a soft camel's hair brush or lens tissue. For the opal view glass, use a clean, soft cloth *slightly* dampened with clear water or lens cleaner.
3. If dirt should fall into the camera and down into the bellows and lens area, use only a spray of air from an ear syringe for cleaning. Invert the Repronar; set the Instantaneous-Bulb Selector on "B"; depress the shutter release; and lock in the open position while cleaning the camera. Release the shutter as soon as the dust has been blown from the camera.
4. Any foreign object on the reflector will reproduce on the film and must be removed.

CAUTION — Do not use a compressed-air hose to clean the Repronar camera. Moisture, sand, and other grits may cause permanent damage.

1. Keep the camera case closed and latched. Dust particles are not kind to cameras.
2. Do not leave the shutter cocked. Cover the lens and press the shutter release, if necessary, to relieve the tension on the shutter mechanism.
3. Leave the bellows in a relaxed position, approximately the 1X length. The life of the bellows will be increased if not stored in the extended 4X or the compressed ½X positions.

Care of the Repronar

Cleaning

Storage

Replacing the Fuse

4. Unplug the line cord and wind loosely around the easel.
5. When the Repronar is not in use, keep it covered with the plastic dust cover. (See photo page 24.)

Replacing the View Light

1. The fuse, located on the rear of the easel, protects the circuits of the Repronar. To replace the fuse, press the fuse cap inward and turn as indicated by the arrow. The fuse is held in the cap by a spring clip and will be withdrawn with the cap.
2. Remove the old fuse, insert a new one, and replace in the fuse holder. Push in and turn the cap clockwise to lock.
3. Replace the fuse with a 1.5-amp 125-volt slow-blow type.

CAUTION — Before attempting to replace the view lamp, place the switch in OFF position, unplug the AC cord, and wait 30 minutes.

1. Remove the two screws which attach the lamp socket and screen assembly to the bottom cover.
2. Pull the lamp through the opening in the bottom cover. Push inward on the lamp and turn counterclockwise to remove it from the socket.
3. To insert the new lamp, push in and turn clockwise in the socket. Replace the socket and screen assembly on the bottom cover. Be careful that the wires do not touch the lamp when the assembly is replaced.
4. The lamp is a GE 20R12SC (Honeywell No. 100784).



Warranty Policy


All Honeywell Repronar equipment sold in the United States and its possessions is unconditionally guaranteed against defects in material or workmanship for a period of ninety days after date of delivery to the original retail purchaser. Service will be rendered and defective parts will be replaced without cost to you within the ninety-day time period, provided the Repronar equipment has not been abused, altered, or operated contrary to instructions. Honeywell shall not be liable for any repairs except those made at authorized Honeywell repair centers or alterations except those made with its written consent and shall not be liable for damages from delay or loss of use or for other indirect or consequential damages of any kind, whether caused by defective material or workmanship or otherwise; and it is expressly agreed that Honeywell's liability under all guarantees or warranties, whether expressed or implied, is strictly limited to the correction of defects in material or workmanship as hereinbefore provided. To enable us to properly serve you, the purchase registration card should be filled in COMPLETELY and mailed to Honeywell within five days of purchase. Any Repronar equipment which proves defective during the ninety-day warranty period should be returned to your Honeywell Photographic Dealer with particulars regarding malfunction and date and place of purchase (including evidence of date and place of purchase if requested by Honeywell). The dealer will forward the Repronar equipment with particulars to Honeywell. PLEASE DO NOT SEND YOUR UNIT DIRECTLY TO HONEYWELL, as your Honeywell Photographic Dealer will select the authorized Honeywell repair center which will give you the fastest service.

UNITS SOLD IN CANADA through Honeywell Controls, Ltd., Toronto, Canada, are protected by the same warranty policy outlined above. Repronar equipment requiring service in Canada should be returned to your Canadian Honeywell Photographic Dealer.

For information regarding units, sold in other countries write:

INTERNATIONAL DIVISION
HONEYWELL, INC.
P.O. Box 1010
Littleton, Colorado 80120

All models, prices and specifications are subject to change without notice.



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