

KODAK METAL FILM PACK

VERICHROME, PANATOMIC-X, PLUS-X, AND SUPER-XX PANCHROMATIC FILM PACK FILMS

The Kodak Metal Film Pack in which this film is supplied is for use in film pack cameras and in film pack adapters. Before loading a pack into the camera or adapter, read the directions printed on the face of the *Safety Cover*.

Handle the pack only by the edges. Pressure on the *Safety Cover* must be avoided to prevent any possibility of light entering the pack which would fog the edges of the film.

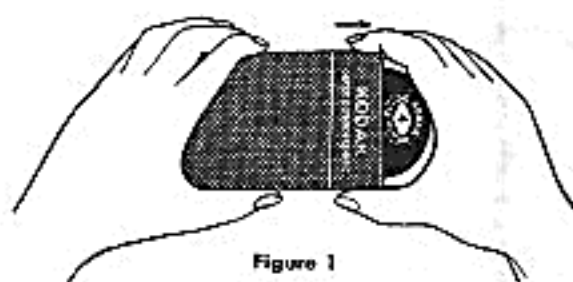


Figure 1

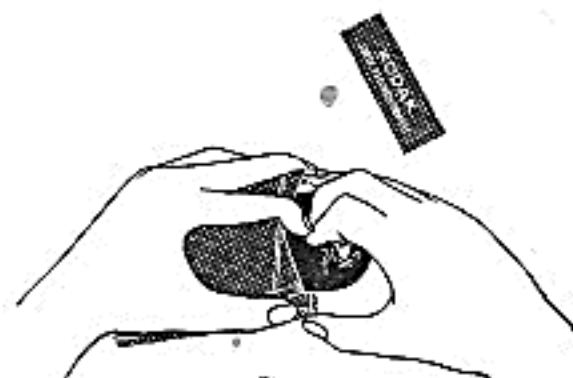


Figure 2

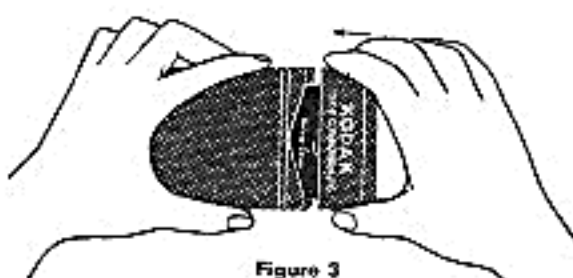


Figure 3

When the pack is securely in position for use, carefully pull out the tab marked "Safety Cover" as far as it will come. Tear off this tab and make the first exposure; then pull the tab marked 1, and the next film will be in position for exposure. Proceed in this manner with each succeeding film until all have been exposed.

The pack may now be removed from camera or adapter, in daylight.

CAUTION: When pulling any one of the tabs, press back the remaining tabs with thumb or finger to prevent the possibility of pulling more than one film at a time. The tab must be pulled straight out.

REMOVAL OF FILMS FROM PACK: Verichrome film should be handled in total darkness or by the aid of a Wratten Series 2 Safelight used in a suitable safelight lamp such as the Kodak Adjustable Safelight Lamp, placed at least 3 feet from the film.

Panatomic-X, Plus-X, and Super-XX Panchromatic films must be handled

in total darkness because of the extreme sensitivity of these films to light of all colors.

TO REMOVE ALL FILMS: Place the film pack with the face down on a table or workbench covered by a clean sheet of paper. Remove the metal end-cap marked "KODAK" by sliding the cap off the end of the film pack case (Figure 1); then raise the film pack case cover by lifting the end of the back cover having the V-shaped cutout. All of the exposed films can then be withdrawn.

TO REMOVE ONE OR MORE FILMS: Before all twelve films have been exposed, place the film pack face down on a table. Remove the metal end-cap marked "KODAK" by sliding the cap off the end of the film pack case (Figure 1). Holding down the tabs attached to the unexposed films, lift the metal back cover having the V-shaped cutout slightly (about $\frac{3}{4}$ inch) and withdraw the exposed films. The *Safety Cover* which is next to the inside of the metal cover should not be removed. Lower the metal cover of the film pack to its original position (Figure 2). With a slight downward pressure, slide the metal end-cap marked "KODAK" into position on the end of the film pack case (Figure 3). Insert the film pack in the adapter or camera while still in the darkroom. The film pack is then ready for the exposure of the remaining films.

SPEED AND RECOMMENDED METER SETTINGS

Kind of Film	Kodak Speed		Weston Meter		G.E. Meter	
	Daylight	Tungsten	Daylight	Tungsten	Daylight	Tungsten
VERICHROME	250	125	50	24	80	40
PANATOMIC-X	125	80	24	16	40	24
PLUS-X	250	160	50	32	80	50
SUPER-XX	400	320	80	64	128	100

FILTER FACTORS: Normal exposure (without a filter) must be multiplied by the factors shown below to obtain correct exposure with filter.

Filter	VERICHROME		PANATOMIC-X PLUS-X		SUPER-XX	
	Sunlight	Tungsten	Sunlight	Tungsten	Sunlight	Tungsten
K1	2.0	1.5	1.5	1.5	1.5	1.5
K2	2.5	2.0	2.0	1.5	2.0	1.5
G	5.0	3.0	3.0	2.0	2.5	2.0
A	—	—	7.0	4.0	4.0	2.0

Note: Individual lighting conditions vary considerably and the filter factors will vary accordingly; therefore, the above factors are approximate only. The values given, however, will serve as a guide.

(Over)

DAYLIGHT EXPOSURE TABLE

With lens apertures as listed below, the exposure will be as follows: 1/25 second for Panatomic-X, 1/50 second for Verichrome and Plus-X, and 1/100 second for Super-XX.

Light Condition	Brilliant ¹ Subjects	Bright ² Subjects	Average ³ Subjects	Shaded ⁴ Subjects
Bright Sun	f/22	f/16	f/11	f/8
Hazy Sun	f/16	f/11	f/8	f/5.6
Cloudy-Bright	f/11	f/8	f/5.6	f/4
Cloudy-Dull	f/8	f/5.6	f/4	f/2.8

¹**Brilliant Subjects:** Beach, marine, and snow scenes; distant landscapes and mountains without prominent dark objects in the foreground.

²**Bright Subjects:** Near-by people in marine, beach, or snow scenes; scenics with foreground objects.

³**Average Subjects:** Near-by people, gardens, houses, and scenes not in the shade. Use this classification if in doubt.

⁴**Shaded Subjects:** People, gardens, and other subjects in the open shade (lighted by open sky—not under trees, porch roof, etc.).

PHOTOFLOOD EXPOSURE TABLE FOR SUPER-XX FILM With Lamps in Kodak Handy Reflectors*

Lamps	Lens Opening with Shutter Speed 1/25 Second					
	f/11	f/8	f/5.6	f/4	f/2.8	f/2
Distance of Subject to Lamps in Feet						
2 No. 1 LAMPS	3	5	7	10	14	20
1 No. 1 LAMP AND 1 No. 2 LAMP	3½	5½	8	11	16	23
2 No. 2 LAMPS	4	6	9	12	18	26

*If two or more reflectors are used at different distances, average the distances of the lamps to the subject and calculate the exposure by using the average of the different distances in combination with the total number of lamps being used.

For Plus-X or Verichrome Film, increase exposure 1 lens opening.

For Panatomic-X Film, increase exposure 2 lens openings.

• DEVELOPMENT •

SAFELIGHTS: Kodak Verichrome Film Pack should be handled and developed in complete darkness or by the aid of a Wratten Series 2 (dark red) Safelight used in suitable safelight lamp such as the Kodak Adjustable Safelight Lamp.

Kodak Panatomic-X, Plus-X, and Super-XX Film Packs must be handled and developed in total darkness or by the aid of a Wratten Series 3 (dark green) Safelight, after development has been in progress for one-half the total development time, provided the light is at least 3 feet from the film.

CAUTION: Be sure to remove all remaining strips of paper or gum tape from the end of each film before actual development is started.

Kodak D-76 and Kodak DK-20 Developers are recommended for developing these films. If normal contact prints or moderate enlargements are to be made, Kodak D-76 Developer is recommended. For minimum graininess and where extreme enlargements are to be made, Kodak DK-20 Fine Grain Developer is recommended.

Note: Kodak D-76 and Kodak DK-20 Developers, in prepared powder form, are obtainable in several sizes convenient for use.

APPROXIMATE TIMES OF DEVELOPMENT AT 68° F. (20° C.)

Kodak Developer	Film	Tray	Tank
D-76	Verichrome	13 minutes	17 minutes
	Panatomic-X	15 minutes	19 minutes
	Plus-X	13 minutes	17 minutes
	Super-XX	13 minutes	17 minutes
DK-20	Verichrome	12 minutes	15 minutes
	Panatomic-X	15 minutes	19 minutes
	Plus-X	12 minutes	15 minutes
	Super-XX	12 minutes	15 minutes

Greater or less contrast can be obtained by developing longer or shorter times than those specified.

RINSING AND FIXING: After developing, rinse the film thoroughly in water; then immerse it in an acid hardening fixing bath. This may be prepared conveniently, using Kodak Acid Fixing Powders dissolved in water, or a fixing solution made according to the Kodak F-5 formula.

Fix the film for twice the time required to clear it of all milkiness—about 15 to 20 minutes at 68° F. (20° C.). The fixing bath may be saved by storing it in a stoppered bottle. It should be discarded as soon as the time of clearing becomes excessive—more than 10 minutes at 68° F.

WASHING AND DRYING: After fixing, wash the films for about 20 to 30 minutes with an adequate supply of running water, and wipe the surface carefully with a Kodak Photo Chamois or soft sponge before drying.

If desired, more technical and detailed information about these films and developing procedures may be had by writing the Eastman Kodak Company or by consulting the *Kodak Reference Handbook* or *Kodak Films*, a Data Book on Black-and-White Negative Materials, both on sale at your Kodak dealer.

EASTMAN KODAK COMPANY, Rochester, N. Y.