

Konica Color Professional 160 Film

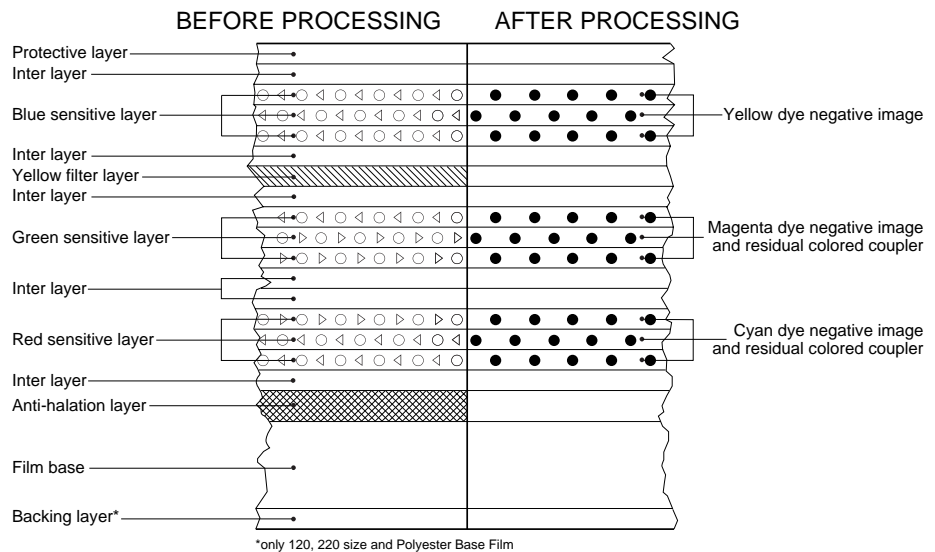
FEATURES

Konica Color Professional 160 Film is an ISO 160/23° color negative film balanced for daylight and electronic flash, and suitable for short exposure times (1/10-1/10,000 sec.).

This film is designed especially for studio portraiture and wedding photography. Utilizing Konica's latest emulsion technologies such as JX-Crystal, JX-Coupler, and SISS (Simulated Ideal Spectral Sensitivity), Professional 160 provides extremely fine grain, rich gradations with faithful reproduction of every color in the subject.

Together with outstanding stability, this quality meets the stringent requirements of demanding professionals.

LAYER STRUCTURE



FILM BASE AND FILM SIZES AVAILABLE

135	Triacetate base	
120, 220	Triacetate base	
Long Roll	Triacetate base: 35mm X 100'	Perforation: •Non-perforated •Double perforated Winding: •Core •Spool
	Polyester base: 35mm X 100' 46mm X 100' 70mm X 100'	Perforation: •Non-perforated Winding: •Core •Spool

RECIPROCITY FAILURE COMPENSATION

This film is designed for exposure times from 1/10 to 1/10,000 sec. with electronic flash, daylight or blue flash bulbs. Pretest for reciprocity failure compensation if exposure time is outside this range.

FILM SPEED

EXPOSURE CONDITIONS

Konica Color Professional 160 Film is designed for exposure with daylight and electronic flash.

For best results with other light sources, the use of appropriate filter is recommended.

Use the speed numbers in the table below for cameras or light meters marked for ISO, ASA, or DIN speeds or exposure indexes. For critical work, make an exposure test.

Light Source	ISO Speed	Light Balancing Filter
Daylight or Electronic Flash	160/23°	None
Photolamp (3400K)	50/18*	Wratten No. 80B
Tungsten (3200K)	40/17*	Wratten No. 80A

*Includes the exposure factor to obtain best color results without special printing.

DAYLIGHT EXPOSURE

EXPOSURE GUIDE TABLE: Outdoors under daylight

Light Conditions	Bright or Hazy Sun on Light Sand or Snow	Bright or Hazy Sun (Distinct Shadows)	Weak, Hazy Sun (Soft Shadows)	Cloudy Bright (No Shadows)	Heavy Overcast or Open shade
Lens Opening	f/16-2/3	f/11-2/3	f/8-2/3	f/5.6-2/3	f/4-2/3
Shutter Speed	1/250 sec.	1/250 sec.	1/250 sec.	1/250 sec.	1/250 sec.

This table is applicable for exposures from 2 hours after sunrise to 2 hours before sunset.

The use of an exposure meter is highly recommended in cloudy weather or in open shade since light intensity differentials are in continual flux.

Apertures increased by one or two stops are usually suitable for back-lighted, close-up subjects.

ELECTRONIC FLASH EXPOSURE

Use the guide numbers in the following table as a standard for this film. Select the output closest to the number given by your flash manufacturer. Then find the guide number for feet or meters. To determine the lens opening, divide the guide number by the flash-to-subject distance. If your films are overexposed, use a higher guide number; if they're underexposed use a lower number.

Electronic Flash Guide Numbers

Output (BCPS*)	350	500	700	1000	1400	2000	2800	4000	5600	8000
Guide No. (for Distances in Feet)	55	65	75	90	110	130	150	180	210	250
Guide No. (for Distances in Meters)	17	20	22	27	33	40	46	55	65	75

*BCPS=beam candlepower seconds

PROCESSING

Konica Color Negative Film Process CNK-4 Series or Process C-41

EVALUATING NEGATIVE EXPOSURE

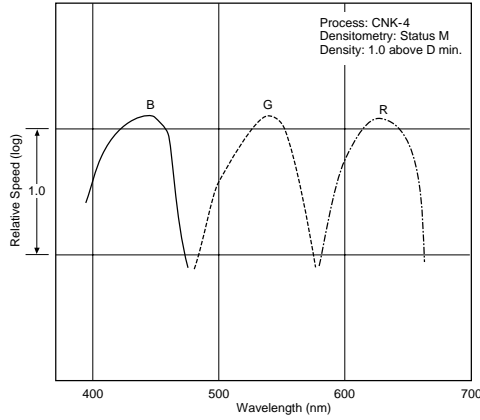
Expose Konica Color Professional 160 Film carefully for optimum results. Exposure level of negatives may be checked with a suitable electronic densitometer equipped with a filter such as a Wratten Gelatin Filter No. 92. Depending on the light source for exposure, the density of test negative taken using a gray card of 18% reflectance and exposed under the same illumination as the intended subject, should measure through the red filter in the range of **0.75 ~ 0.95**.

GRANULARITY

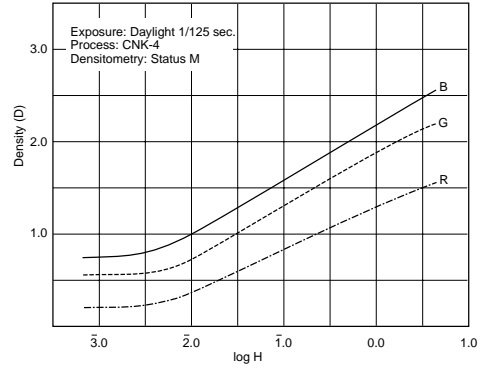
DIFFUSE R.M.S. GRANULARITY: 4
 Magnification: 12X
 Aperture diameter: $48\mu\text{m}\phi$
 Diffuse transmission density: D min. +1.0

SPECTRAL SENSITIVITY • CHARACTERISTIC CURVES

SPECTRAL SENSITIVITY

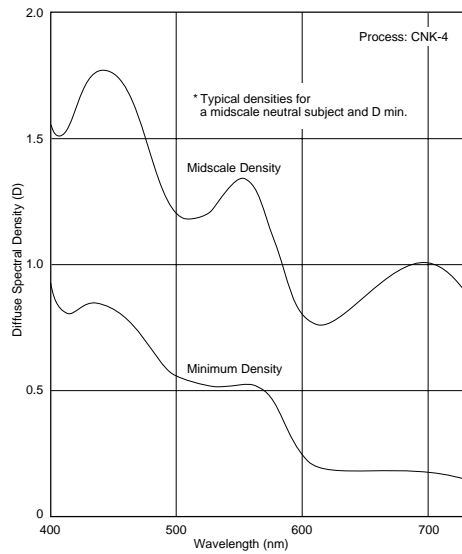


CHARACTERISTIC CURVES

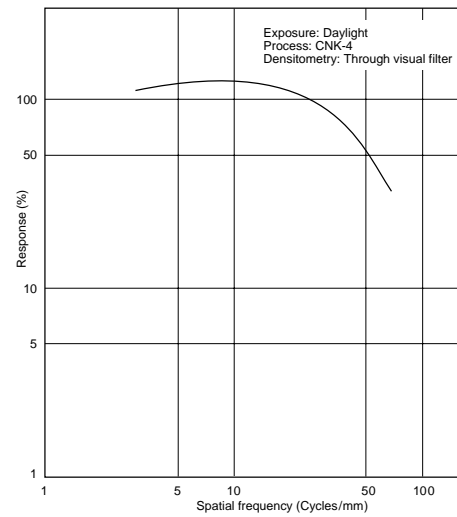


SPECTRAL DYE DENSITY CURVES • SHARPNESS

SPECTRAL DYE DENSITY CURVES



MODULATION TRANSFER FUNCTION



RESOLVING POWER

Test-Object Contrast 1.6:1— 63 lines/mm
 Test-Object Contrast 1000:1— 125 lines/mm

PRECAUTIONS

Konica Color Professional 160 Film features enhanced raw stock and latent image stability, and resistance to harmful gases. However, the following precautions must be observed in handling color negative films:

1. HANDLING OF FILM: Avoid direct sunlight or other strong light when loading or unloading camera.
2. PROCESSING AND PRINTING: Process and print promptly after exposure to minimize effects of latent image change.
3. STORAGE OF FILM: Keep unused film in a cool, dry place such as a refrigerator. (Storage at below 10°C or 50°F is recommended.)
Avoid the following conditions:
 - i) High temperature and high humidity.
 - ii) Exposure to harmful gases such as formaldehyde.
 - iii) Leaving film in camera for extended periods.
4. EXPIRATION DATE OF FILM: For best results, process before expiration date stamped on package.
5. STORAGE OF PROCESSED FILM: Keep processed film in a cool, dry and dark place to minimize fading of dyes.

NOTICE: The characteristic curves and data in this publication represent test results obtained under the specified conditions of exposure and processing. They do not represent standards or specifications for Konica products. The manufacturer reserves the right to modify product characteristics at any time.