FUJIFILM

FUJIFILM MOTION PICTURE FILM MANUAL

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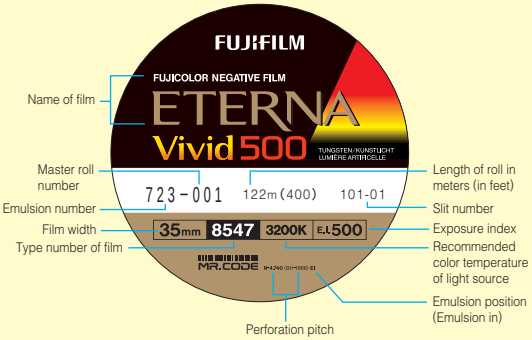
FUJICOLOR NEGATIVE FILM

ITEM		TUNGSTEN TYPE				
		ETERNA Vivid160	ETERNA 250	ETERNA 400	ETERNA Vivid500	ETERNA 500
TYPE No.	35mm	8543	8553	8583	8547	8573
	16mm	8643	8653	8683	8647	8673
E.I.	TUNGSTEN	160	250	400	500	500
	DAYLIGHT	100	160	250	320	320
		Kodak Filter No.85				
SIDEPRINT		*FN43*	*FN53*	*FN83*	*FN47*	*FN73*

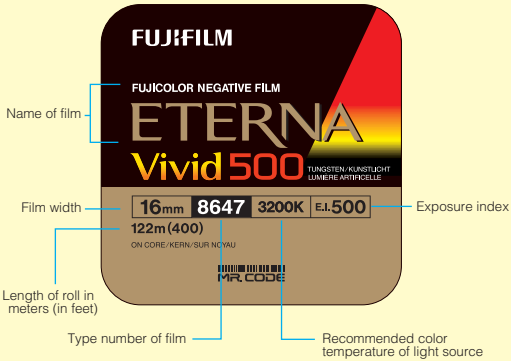
ITEM		DAYLIGHT TYPE			
		F-64D	ETERNA Vivid250D	ETERNA 250D	REALA 500D
TYPE No.	35mm	8522	8546	8563	8592
	16mm	8622	8646	8663	8692
E.I.	TUNGSTEN	16	64	64	125
		Kodak Daylight Filter No.80A			
	DAYLIGHT	64	250	250	500
SIDEPRINT		*FN22*	*FN46*	*FN63*	*FN92*

How to read labels

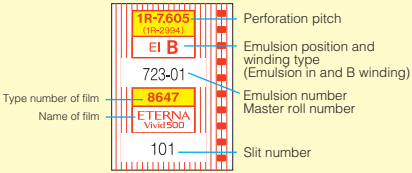
● 35mm



● 16mm

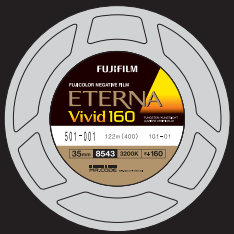


● Original Seal



35mm TUNGSTEN TYPE

ETERNA Vivid 160
(E.I. 160)
Type 8543



• Original Tape



• Film Identification Code

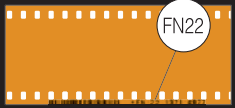


DAYLIGHT TYPE

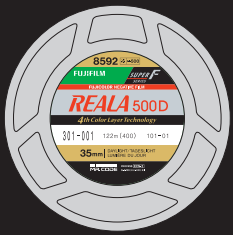
F-64D (E.I. 64)
Type 8522



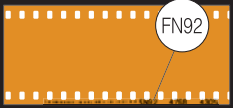




REALA 500D (E.I. 500)
Type 8592







16mm TUNGSTEN TYPE

ETERNA Vivid 160
(E.I. 160)
Type 8643



• Original Seal

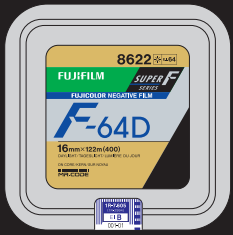


• Film Identification Code

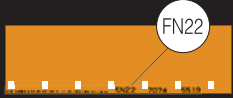


DAYLIGHT TYPE

F-64D (E.I. 64)
Type 8622



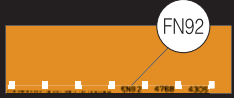




REALA 500D (E.I. 500)
Type 8692

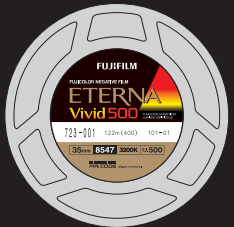






35mm TUNGSTEN TYPE

ETERNA Vivid 500
(E.I.500)
Type 8547



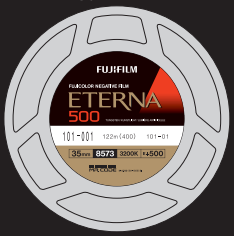
● Original Tape



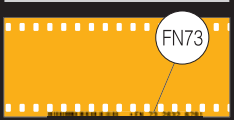
● Film Identification Code



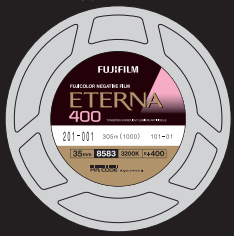
ETERNA 500
(E.I.500)
Type 8573



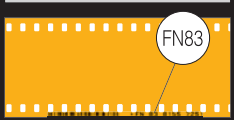




ETERNA 400
(E.I.400)
Type 8583

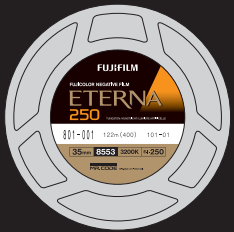






35mm TUNGSTEN TYPE

ETERNA 250
(E.I.250)
Type 8553





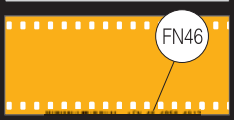


DAYLIGHT TYPE

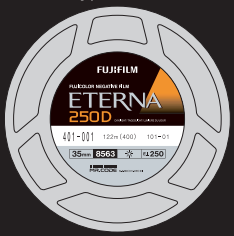
ETERNA Vivid 250D
(E.I.250)
Type 8546



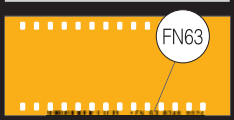




ETERNA 250D
(E.I.250)
Type 8563

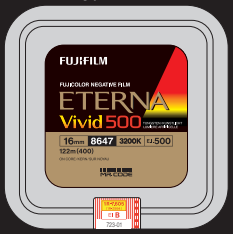






16mm TUNGSTEN TYPE

ETERNA Vivid 500
(E.I.500)
Type 8647



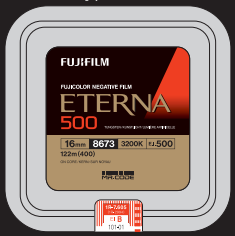
- **Original Seal**

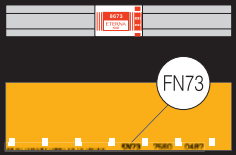


- **Film Identification Code**



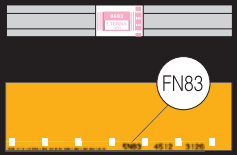
ETERNA 500
(E.I.500)
Type 8673





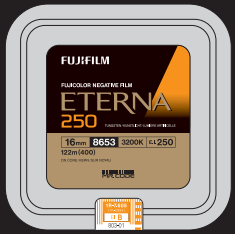
ETERNA 400
(E.I.400)
Type 8683

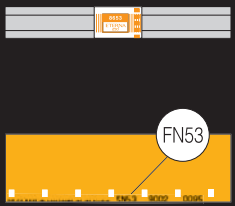




16mm TUNGSTEN TYPE

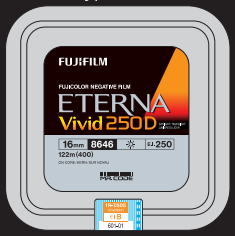
ETERNA 250
(E.I.250)
Type 8653

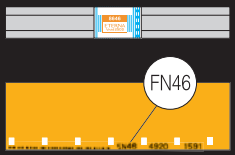




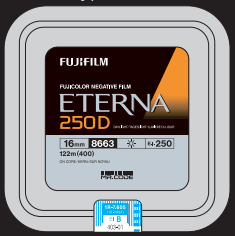
DAYLIGHT TYPE

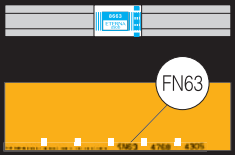
ETERNA Vivid 250D
(E.I.250)
Type 8646





ETERNA 250D
(E.I.250)
Type 8663





FUJICOLOR NEGATIVE FILM
ETERNA
Vivid 160

35mm Type 8543 / 16mm Type 8643



High color saturation

High contrast

Exceptional image sharpness

● Exposure index

Tungsten light (3200K)... 160
Daylight ..... 100 (with Kodak Filter No.85)

Numbers are for use with exposure meters marked for ISO/ASA speeds. Please note, however, that recommended exposure indexes may not apply due to differences in exposure meters, how they are used, and processing conditions. For best results, test exposures should be made based on instructions for the exposure meter to be used.

● Reciprocity characteristics

ETERNA Vivid 160 requires no filter corrections or exposure adjustments for shutter speeds of 1/1000 to 1/10 second. For exposures of 1 second, open the lens 1/3 of a stop.

● Edge markings

The MR code system [edge number, film identification mark (FN43), and machine-readable bar code for each, film name (FUJI 160), emulsion number, roll number, frame marks (4 perforations apart for 35mm film; no frame marks for 16mm film)] is printed as latent images.

● Color balance

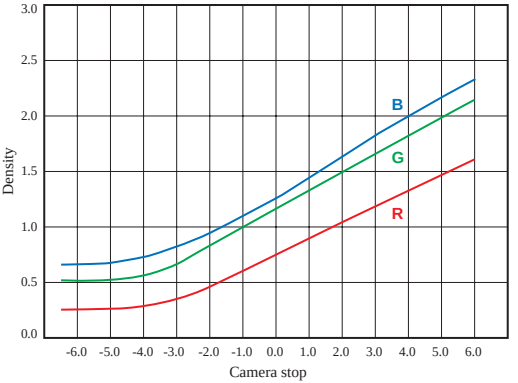
ETERNA Vivid 160 is color balanced for tungsten light (3200K), and requires no filters for use in these conditions. When shooting outdoors in daylight or under other light sources, the following conversion filters and exposure adjustments should be made.

Light source	Filter	Filter Exposure index
Tungsten light (3200K)	None	160
Daylight (sunlight + skylight)	Kodak Filter No.85	100
Metal halide lamps (e.g. HMI)	Kodak Filter No.85	100
Ordinary fluorescent lamps (White light type)	Kodak Filter CC30R	80
(Daylight type)	Kodak Filter No.85	100
Three-band fluorescent lamps White daylight type (5000K)	Kodak Filter CC30R	80
Daylight type (6700K)	Kodak Filter CC40R	64

These filter recommendations will provide approximate color temperature conversion. Final color correction should be done when printing.

Characteristic curves

Exposure : 3200K light source for 1/50 second with Fuji Filter SC-41
Processing : Specified standard conditions
Densitometry : Three color densities (status M)



In order to simulate conditions closest to practical use, exposure was made under a 3200K tungsten light source, through a Fuji SC-41 ultraviolet absorbing filter. Processing was carried out under standard conditions and the three color densities were measured, producing the results indicated in the graph above.

FUJICOLOR NEGATIVE FILM
ETERNA 250

35mm Type 8553 / 16mm Type 8653



Enhanced latitude

Enhanced gradation balance

Improved intercuttability

Exceptional grain

Superb sharpness

● Exposure index

Tungsten light (3200K)... 250
Daylight ..... 160 (with Kodak Filter No.85)

Numbers are for use with exposure meters marked for ISO/ASA speeds. Please note, however, that recommended exposure indexes may not apply due to differences in exposure meters or the way they are used, or variations in processing conditions. For best results, test exposures should be made, following the instructions for the exposure meter to be used.

● Reciprocity characteristics

ETERNA 250 requires no filter corrections or exposure adjustments for shutter speeds of 1/1000 to 1/10 second. For exposures of 1 second, open the lens 1/3 of a stop.

● Edge markings

MR code system [edge number, film identification mark (FN53), and their machine-readable bar codes, film name (FUJI 250), emulsion number, roll number, frame marks (5 perforations apart for 65mm film; 4 perforations apart for 35mm film; no frame marks for 16mm film)] is printed as latent images.

● Color balance

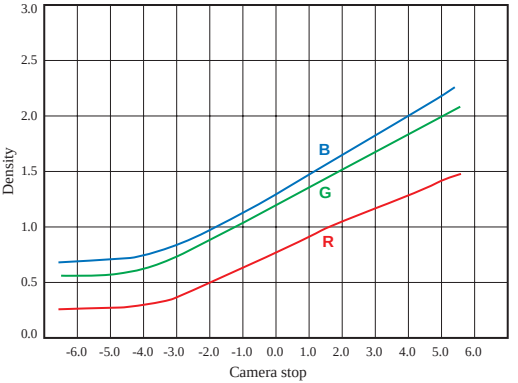
ETERNA 250 is color balanced for tungsten light (3200K), eliminating the need for filters in these conditions. When shooting under other light sources, use the conversion filters and exposure adjustments listed here.

Light source	Filter	Exposure index
Tungsten light (3200K)	None	250
Daylight (sunlight + skylight)	Kodak Filter No.85	160
Metal halide lamps (e.g. HMI)	Kodak Filter No.85	160
Ordinary fluorescent lamps (White light type)	Kodak Filter CC30R	125
(Daylight type)	Kodak Filter No.85	160
Three-band fluorescent lamps White daylight type (5000K)	Kodak Filter CC30R	125
Daylight type (6700K)	Kodak Filter CC40R	100

These filter recommendations will provide approximate color temperature conversion. Final color correction should be done during printing.

Characteristic curves

Exposure : 3200K light source for 1/50 second with Fuji Filter SC-41
Processing : Specified standard conditions
Densitometry : Three color densities (status M)



In order to simulate conditions closest to practical use, exposure was made under a 3200K tungsten light source, through a Fuji SC-41 ultraviolet absorbing filter. Processing was carried out under standard conditions and the three color densities were measured, producing the results indicated in the graph above.

FUJICOLOR NEGATIVE FILM
ETERNA 400

35mm Type 8583 / 16mm Type 8683



Enhanced shadow detail

Natural Color Reproduction (atmospheric color)

Exceptionally fine grain

High speed, with smooth gradation

Excellent sharpness

Enhanced telecine characteristics

● Exposure index

Tungsten light (3200K)... 400
Daylight ..... 250 (with Kodak Filter No.85)

Numbers are for use with exposure meters marked for ISO/ASA speeds. Please note, however, that recommended exposure indexes may not apply due to differences in exposure meters, how they are used, and processing conditions. For best results, test exposures should be made based on instructions for the exposure meter to be used.

● Reciprocity characteristics

ETERNA 400 requires no filter corrections or exposure adjustments for shutter speeds of 1/1000 to 1/10 second. For exposures of 1 second, open the lens 1/3 of a stop.

● Edge markings

The MR code system [edge number, film identification mark (FN83), and machine-readable bar code for each, film name (FUJI 400), emulsion number, roll number, frame marks (4 perforations apart for 35mm film; no frame marks for 16mm film)] is printed as latent images.

● Color balance

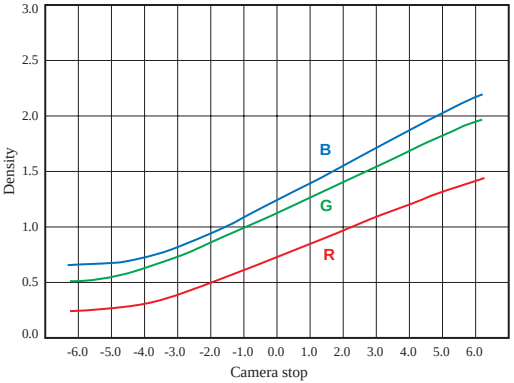
ETERNA 400 is color balanced for tungsten light (3200K), and requires no filters for use in these conditions. When shooting outdoors in daylight or under other light sources, the following conversion filters and exposure adjustments should be made.

Light source	Filter	Exposure index
Tungsten light (3200K)	None	400
Daylight (sunlight + skylight)	Kodak Filter No.85	250
Metal halide lamps (e.g. HMI)	Kodak Filter No.85	250
Ordinary fluorescent lamps (White light type)	Kodak Filter CC30R	200
(Daylight type)	Kodak Filter No.85	250
Three-band fluorescent lamps White daylight type (5000K)	Kodak Filter CC30R	200
Daylight type (6700K)	Kodak Filter CC40R	160

These filter recommendations will provide approximate color temperature conversion. Final color correction should be done when printing.

Characteristic curves

Exposure : 3200K light source for 1/50 second with Fuji Filter SC-41
Processing : Specified standard conditions
Densitometry : Three color densities (status M)



In order to simulate conditions closest to practical use, exposure was made under a 3200K tungsten light source, through a Fuji SC-41 ultraviolet absorbing filter. Processing was carried out under standard conditions and the three color densities were measured, producing the results indicated in the graph above.

FUJICOLOR NEGATIVE FILM
ETERNA
Vivid 500

35mm Type 8547/ 16mm Type 8647



High color saturation

High contrast

Optimized gradation balance

A Seamless Match with Vivid 160

Enhanced telecine characteristics

● Exposure index

Tungsten light (3200K)... 500
Daylight ..... 320 (with Kodak Filter No.85)

Numbers are for use with exposure meters marked for ISO/ASA speeds. Please note, however, that recommended exposure indexes may not apply due to differences in exposure meters, how they are used, and processing conditions. For best results, test exposures should be made based on instructions for the exposure meter to be used.

● Reciprocity characteristics

ETERNA Vivid 500 requires no filter corrections or exposure adjustments for shutter speeds of 1/1000 to 1/10 second. For exposures of 1 second, open the lens 1/3 of a stop.

● Edge markings

The MR code system [edge number, film identification mark (FN47), and machine-readable bar code for each, film name (FUJI V500), emulsion number, roll number, frame marks (4 perforations apart for 35mm film; no frame marks for 16mm film)] is printed as latent images.

● Color balance

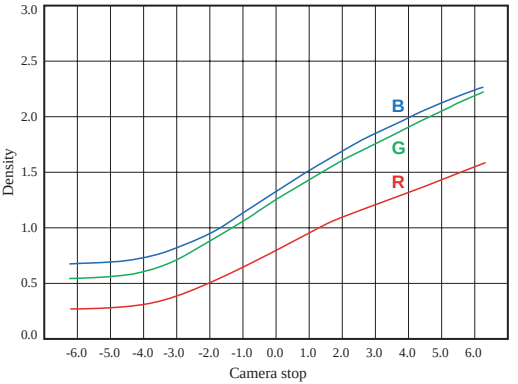
ETERNA Vivid 500 is color balanced for tungsten light (3200K), and requires no filters for use in these conditions. When shooting outdoors in daylight or under other light sources, the following conversion filters and exposure adjustments should be made.

Light source	Filter	Exposure index
Tungsten light (3200K)	None	500
Daylight (sunlight + skylight)	Kodak Filter No.85	320
Metal halide lamps (e.g. HMI)	Kodak Filter No.85	320
Ordinary fluorescent lamps (White light type)	Kodak Filter CC30R	250
(Daylight type)	Kodak Filter No.85	320
Three-band fluorescent lamps White daylight type (5000K)	Kodak Filter CC30R	250
Daylight type (6700K)	Kodak Filter CC40R	200

These filter recommendations will provide approximate color temperature conversion. Final color correction should be done when printing.

Characteristic curves

Exposure : 3200K light source for 1/50 second with Fuji Filter SC-41
Processing : Specified standard conditions
Densitometry : Three color densities (status M)



In order to simulate conditions closest to practical use, exposure was made under a 3200K tungsten light source, through a Fuji SC-41 ultraviolet absorbing filter. Processing was carried out under standard conditions and the three color densities were measured, producing the results indicated in the graph above.

FUJICOLOR NEGATIVE FILM
ETERNA 500

35mm Type 8573 / 16mm Type 8673



Ultra-fine grain

Outstanding gradation balance

Excellent sharpness

Broad exposure latitude

Enhanced film-to-tape characteristics

● Exposure index

Tungsten light (3200K)... 500
Daylight ..... 320 (with Kodak Filter No.85)

Numbers are for use with exposure meters marked for ISO/ASA speeds. Please note, however, that recommended exposure indexes may not apply due to differences in exposure meters, how they are used, and processing conditions. For best results, test exposures should be made based on instructions for the exposure meter to be used.

● Reciprocity characteristics

ETERNA 500 requires no filter corrections or exposure adjustments for shutter speeds of 1/1000 to 1/10 second. For exposures of 1 second, open the lens 1/3 of a stop.

● Edge markings

The MR code system [edge number, film identification mark (FN73), and machine-readable bar code for each, film name (FUJI 500), emulsion number, roll number, frame marks
(4 perforations apart for 35mm film; no frame marks for 16mm film)] is printed as latent images.

● Color balance

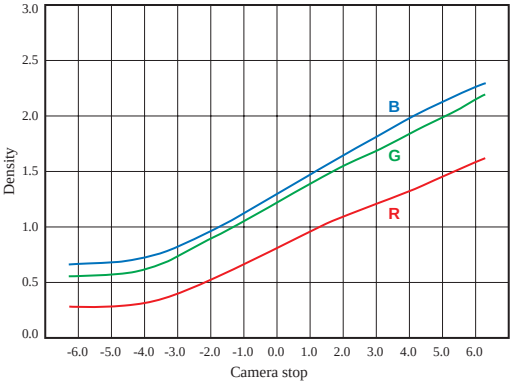
ETERNA 500 is color balanced for tungsten light (3200K), and requires no filters for use in these conditions. When shooting outdoors in daylight or under other light sources, the following conversion filters and exposure adjustments should be made.

Light source	Filter	Exposure index
Tungsten light (3200K)	None	500
Daylight (sunlight + skylight)	Kodak Filter No.85	320
Metal halide lamps (e.g. HMI)	Kodak Filter No.85	320
Ordinary fluorescent lamps (White light type)	Kodak Filter CC30R	250
(Daylight type)	Kodak Filter No.85	320
Three-band fluorescent lamps White daylight type (5000K)	Kodak Filter CC30R	250
Daylight type (6700K)	Kodak Filter CC40R	200

These filter recommendations will provide approximate color temperature conversion. Final color correction should be done when printing.

Characteristic curves

Exposure : 3200K light source for 1/50 second with Fuji Filter SC-41
Processing : Specified standard conditions
Densitometry : Three color densities (status M)



In order to simulate conditions closest to practical use, exposure was made under a 3200K tungsten light source, through a Fuji SC-41 ultraviolet absorbing filter. Processing was carried out under standard conditions and the three color densities were measured, producing the results indicated in the graph above.

FUJICOLOR NEGATIVE FILM

F-64D

35mm Type 8522 / 16mm Type 8622



Fine grain structure and sharpness

Long, smooth tonal scale

Superb digital output

Exceptional performance in high-contrast outdoor lighting

Subtle shadow detail

Rich reproduction of greens, blues, and yellows

● Exposure index

Daylight 64

This number is appropriate for use with exposure meters marked for ISO/ASA speeds. It should be noted, however, that the recommended exposure index may not apply exactly due to differences in processing, the usage of exposure meters, or other conditions. For best results it is recommended that test exposures be made prior to use, referring to instructions for the exposure meter used.

● Reciprocity characteristics

Fujicolor Negative Film F-64D does not need lens opening adjustment nor filtration to avoid a shift of color balance when used with shutter speeds of 1/1000 to 1/10 second. When the exposure time is 1 second, use 1/ 3 stop larger lens opening.

● Edge markings

MR code system [key number, film identification mark (FN22), and machine-readable bar code for each; film name FUJI F-64D, emulsion number, roll number, frame marks (5, 8, 15 perforations apart for 65mm film, 4 perforations apart for 35mm film, no frame marks for 16mm film), etc.] is printed as latent images.

● Color balance

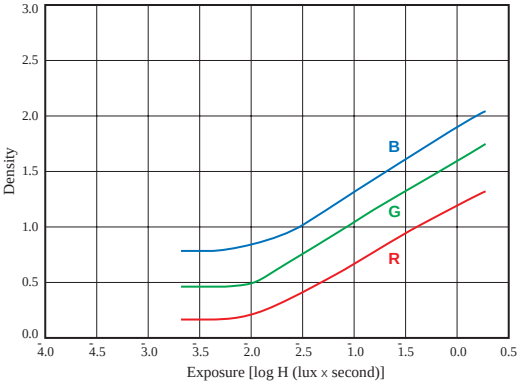
This film is color-balanced for exposure to daylight. No light balancing or conversion filters are required with this light source. Where the light source varies significantly from this color temperature, as in tungsten light filming, the following filters and exposure indexes are recommended.

Light source	Filter	Exposure index
Daylight (sunlight + skylight)	None	64
Tungsten light	Kodak Daylight Filter No.80A	16
Metal halide lamps (e.g. HMI)	None	64
Ordinary fluorescent lamps (White light type)	None	64
White Daylight type	None	64
Three-band fluorescent lamps White daylight type (5000K)	None	64
Daylight type (6700K)	None	64

The above filter recommendations should provide approximate color conversion.
Final color correction should be made when making prints.

Characteristic curves

Exposure : 5400K light source for 1/50 second with Fuji Filter SC-41
Processing : Specified standardized conditions
Densitometry : Three color densities (status M)



In order to simulate conditions closest to practical use, exposure was made under a 5400K light source, through a Fuji SC-41 ultraviolet absorbing filter. Processing was carried out under standard conditions and the three color densities (status M) were measured. The results of measurements are plotted as characteristic curves.

FUJICOLOR NEGATIVE FILM
ETERNA
Vivid 250D

35mm Type 8546 / 16mm Type 8646



High color saturation

High contrast

Enhanced telecine characteristics

Optimized gradation balance

A Seamless Match with Vivid 500

● Exposure index

Tungsten light (3200K)... 64 (with Kodak Daylight Filter No.80A)
Daylight 250

Numbers are for use with exposure meters marked for ISO/ASA speeds. Please note, however, that recommended exposure indexes may not apply due to differences in exposure meters, how they are used, and processing conditions. For best results, test exposures should be made based on instructions for the exposure meter to be used.

● Reciprocity characteristics

ETERNA Vivid 250D requires no filter corrections or exposure adjustments for shutter speeds of 1/1000 to 1/10 second. For exposures of 1 second, open the lens 1/3 of a stop.

● Edge markings

The MR code system [edge number, film identification mark (FN46), and machine-readable bar code for each, film name (FUJI V250), emulsion number, roll number, frame marks (4 perforations apart for 35mm film; no frame marks for 16mm film)] is printed as latent images.

● Color balance

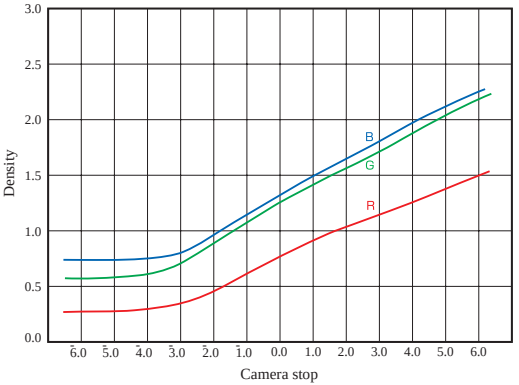
ETERNA Vivid 250D is color balanced for daylight, and requires no filters for use in these conditions. When shooting under other light sources, the following conversion filters and exposure adjustments should be made.

Light source	Filter	Exposure index
Daylight (sunlight + skylight)	None	250
Tungsten light (3200K)	Kodak Daylight Filter No.80A	64
Metal halide lamps (e.g. HMI)	None	250
Ordinary fluorescent lamps (White light type)	None	250
(Daylight type)	None	250
Three-band fluorescent lamps White daylight type (5000K)	None	250

These filter recommendations will provide approximate color temperature conversion.
Final color correction should be done during printing.

Characteristic curves

Exposure : 5400K light source for 1/50 second with Fuji Filter SC-41
Processing : Specified standardized conditions
Densitometry : Three color densities (status M)



In order to simulate conditions closest to practical use, exposure was made under a 5400K tungsten light source, through a Fuji SC-41 ultraviolet absorbing filter. Processing was carried out under standard conditions and the three color densities were measured, producing the results indicated in the graph above.

FUJICOLOR NEGATIVE FILM
ETERNA 250D

35mm Type 8563 / 16mm Type 8663



Enhanced latitude

Enhanced gradation balance

Improved intercuttability

Exceptional grain

Superb sharpness

● Exposure index

Tungsten light (3200K)... 64 (with Kodak Daylight Filter No.80A)
Daylight 250

Numbers are for use with exposure meters marked for ISO/ASA speeds. Please note, however, that recommended exposure indexes may not apply due to differences in exposure meters or the way they are used, or variations in processing conditions. For best results, test exposures should be made, following the instructions for the exposure meter to be used.

● Reciprocity characteristics

ETERNA 250D requires no filter corrections or exposure adjustments for shutter speeds of 1/1000 to 1/10 second. For exposures of 1 second, open the lens 1/3 of a stop.

● Edge markings

MR code system [edge number, film identification mark (FN63), and their machine-readable bar codes, film name (FUJI 250D), emulsion number, roll number, frame marks (5 perforations apart for 65mm film; 4 perforations apart for 35mm film; no frame marks for 16mm film)] is printed as latent images.

● Color balance

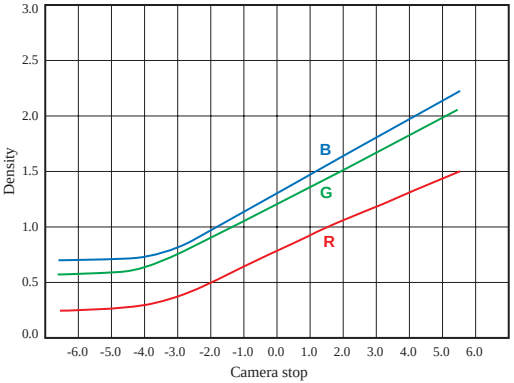
ETERNA 250D is color balanced for daylight, eliminating the need for filters in these conditions. When shooting under other light sources, use the conversion filters and exposure adjustments listed here.

Light source	Filter	Exposure index
Daylight (sunlight + skylight)	None	250
Tungsten light	Kodak Daylight Filter No.80A	64
Metal halide lamps (e.g. HMI)	None	250
Ordinary fluorescent lamps (White light type)	None	250
(Daylight type)	None	250
Three-band fluorescent lamps White daylight type (5000K)	None	250

These filter recommendations will provide approximate color temperature conversion.
Final color correction should be done during printing.

Characteristic curves

Exposure : 5400K light source for 1/50 second with Fuji Filter SC-41
Processing : Specified standardized conditions
Densitometry : Three color densities (status M)



In order to simulate conditions closest to practical use, exposure was made under a 5400K tungsten light source, through a Fuji SC-41 ultraviolet absorbing filter. Processing was carried out under standard conditions and the three color densities were measured, producing the results indicated in the graph above.

FUJICOLOR NEGATIVE FILM
REALA 500D

35mm Type 8592 / 16mm Type 8692



The world's first high-speed (E.I. 500) daylight-type motion picture film

4th Color Layer for natural, faithful color reproduction

Smooth, lifelike skin-tones

Outstanding performance in mixed lighting

Excellent telecine transfer characteristics for high-quality video

● Exposure index

Tungsten light (3200K)... 125 (with Kodak Daylight Filter No.80A)
Daylight 500

These numbers are appropriate for use with exposure meters marked for ISO/ASA speeds. It should be noted, however, that the recommended exposure index may not apply exactly due to differences in processing, the usage of exposure meters, or other conditions. For best results it is recommended that test exposures be made prior to use, referring to instructions for the exposure meter used.

● Reciprocity characteristics

No filter corrections nor exposure adjustments needed for shutter speeds of 1/1000 to 1/10 second. When exposure is 1 second, use 1/3 stop larger lens opening.

● Edge markings

MR code system [key number, film identification mark (FN92), and machine-readable bar code for each; film name FUJI 500D, emulsion number, roll number, frame marks (4 perforations apart for 35mm film, no frame marks for 16mm film), etc.] is printed as latent images.

● Color balance

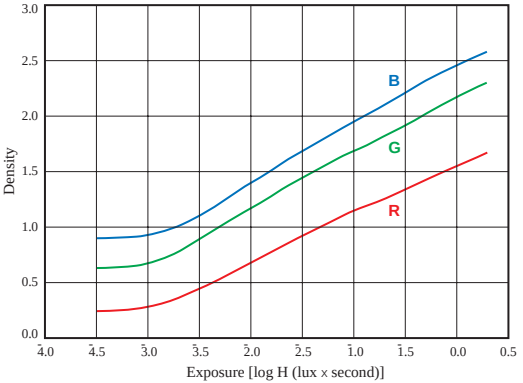
This film is color-balanced for exposure to daylight. For other light sources, use the conversion filters in the table below.

Light source	Filter	Exposure index
Daylight (sunlight + skylight)	None	500
Tungsten light	Kodak Daylight Filter No.80A	125
Metal halide lamps (e.g. HMI)	None	500
Ordinary fluorescent lamps (White light type)	None	500
(Daylight type)	None	500
Three-band fluorescent lamps White daylight type (5000K)	None	500

These filter recommendations should provide approximate color conversion.
Final color correction should be made at the time of printing.

Characteristic curves

Exposure : 5400K light source for 1/50 second with Fuji Filter SC-41
Processing : Specified standardized conditions
Densitometry : Three color densities (status M)



In order to simulate conditions closest to practical use, exposure was made under a 5400K light source, through a Fuji SC-41 ultraviolet absorbing filter. Processing was carried out under standard conditions and the three color densities (status M) were measured. The results of measurements are plotted as characteristic curves.

FUJICOLOR INTERMEDIATE FILM
ETERNA -CI

35mm Type 8503/4503 / 16mm Type 8603



Cinematic impact!

Natural color and tonal reproduction.

● Aim Density in Printing

This film is designed to allow the same printing aim density for both master positives and duplicate negatives. Adjust the density settings on the printer so that the following density values (status M densitometry) may be obtained when a color negative of an 18% reflectance gray patch is appropriately exposed and processed under standard conditions.

Red Density	Dmin + 1.0 ± 0.1
Green Density	Dmin + 1.0 ± 0.1
Blue Density	Dmin + 1.0 ± 0.1

● Edge Markings

The MR. CODE system [key number, film identification code (FI 03), machine-readable bar code, film name (FUJI FCI), emulsion number, roll number, frame marks (4 perforations apart for 35mm stock, no frame mark for 16mm stock) etc.] is printed as latent images.

● Film Base Safelight

Clear safety base (TAC) or polyester base (PET) is used. This film should be handled in total darkness or under safelight conditions. In the latter case a Fuji Safelight Filter No.4 or a Kodak Safelight Filter No.3 (both are dark green) should be used in combination with a 10-watt light, keeping the film at a distance of 1m or more from it. This film can also be handled under the same safelight conditions that are essential to color positive film in which case a Fuji Safelight Filter No. 101A or Kodak Safelight Filter No.8 (both are dark orange) should be used. If the film is to be exposed to these safelight conditions for extended periods, sufficient safety factor testing should be carried out before using the film.

● Printing

In master position production, contact printers are usually employed. In the interest of image stability, however, it is desirable that a step contact printer be used. For duplicate negative production an optical printer can be used. In this case it is desirable to use an optical printer in conjunction with a wet gate projector to inhibit graininess

deterioration due to the matting agent on the emulsion surface. Insert an ultraviolet absorbing filter (Fuji Filter SC-42 or Kodak Wratten Filter No.2E) and a heat-absorbing filter (Fuji Filter No.2043) in the light beam of the printer.

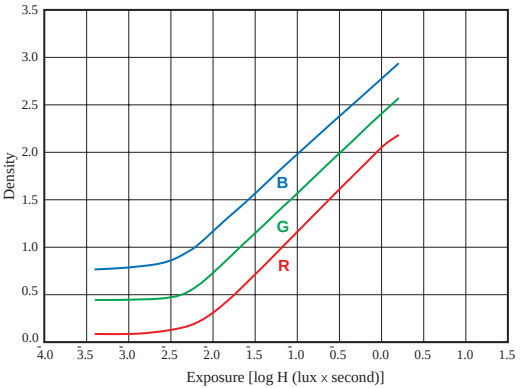
Packaging Units and Perforations

Film Width	Film Length and Winding Type	Core / Spool	Shape, Pitch and Specification of Perforations
35mm	305m (Cellulose triacetate base)	35 x 50 mm core	N-4.740 mm (Negative perforations with short pitch) [ISO 491 : 1988]
	305m (Polyester base)	35 x 50 mm core	
	610m (Cellulose triacetate base)	35 x 75 mm core	
	610m (Polyester base)	35 x 75 mm core	
16mm (Cellulose triacetate base)	*305m x 2 (Single-perforated, type A winding)	16 x 50 mm core	1R-7.605 mm (Single perforations with short pitch) 2R-7.605 mm (Double perforations with short pitch) [ISO 69 : 1972]
	*305m x 2 (Single-perforated, type B winding)	16 x 50 mm core	
	*305m x 2 (Double-perforated)	16 x 50 mm core	
	*610m x 2 (Single-perforated, type A winding)	16 x 75 mm core	
	*610m x 2 (Single-perforated, type B winding)	16 x 75 mm core	
	*610m x 2 (Double-perforated)	16 x 75 mm core	

Items marked with * are supplied on a special order basis.

Characteristic curves

Exposure : 2854K light source for 1/50 second with Fuji Filter SC-42 and correction filter
Processing : Specified standardized conditions
Densitometry : Three color densities (status M)



In order to simulate conditions closest to practical use, exposure was made under a 2854K light source, through a Fuji SC-42 ultraviolet absorbing filter as well as a correction filter which corresponds to the color negative film mask. Processing was carried out under standard conditions and the three color densities (status M) were measured. The results of measurements are plotted as characteristic curves here.

FUJICOLOR RECORDING FILM
ETERNA -RDI *for Digital Intermediate*

35mm Type 8511 / 4511 (PET)



Exceptional sharpness and significant reduction of color cross talk.

● Film Base Safelight

Clear safety base (TAC) or polyester base (PET) is used. This film should be handled in total darkness.

● Digital Recording

The recommended code values for a digital LAD patch are :

	code values
Red	445
Green	445
Blue	445

For Digital Recording, currently offered calibration aims are available. “Carlos aim, CINEON calibration aim and so on”

● Edge Markings

The MR. CODE system [key number, film identification code (FD 11), machine-readable bar code, film name (FUJI RDI), emulsion number, roll number, frame marks (4 perforations apart) etc.] is printed as latent images.

Packaging Units and Perforations

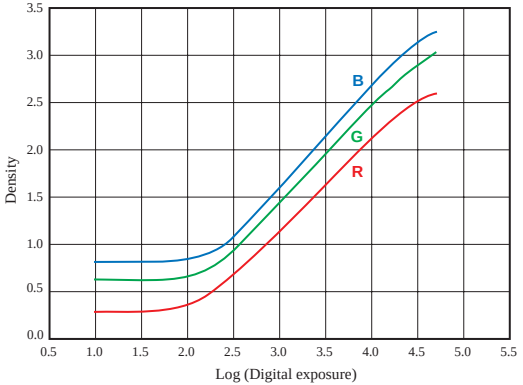
Film Width	Film Length and Winding Type	Core / Spool	Shape, Pitch and Specification of Perforations
35mm	305m (Cellulose triacetate base)	35 x 50 mm core	N-4.740 mm (Negative perforations with short pitch) [ISO 491 : 1988]
	305m (Polyester base)	35 x 50 mm core	
	610m (Cellulose triacetate base)	35 x 75 mm core	
	610m (Polyester base)	35 x 75 mm core	

Characteristic curves

Exposure : Digital exposed by ARRILASER
Maximum exposure values Red 1750
Green 800 Blue 40

Processing : Specified standardized conditions

Densitometry : Three color densities (status M)



FUJICOLOR POSITIVE FILM
ETERNA-CP 3512

35mm Type 3512 / 16mm Type 3612



Advanced image quality and handling ease for total cinematic versatility.

● Film Base

The polyester (PET) safety base does not allow splicing with film cement. Use splicing tape or an ultrasonic splicing device for splicing.

● Safelight

This film should be handled at a distance of 1m ($3^1/_2$ft) or more from a 10-watt electric bulb by the use of a Fuji Safelight Filter N0.101A (dark orange) for color positive film. When the film is exposed to safelight for prolonged periods of time, a sufficient test should be performed to ensure safety.

● Printing

Aim Print Density: Normally expose a negative film normally to 18% reflectance gray card and process the negative film under standard conditions. Print the negative image of the gray card onto the Fujicolor positive film. Fine adjustments should then be made to the printer settings so that the following density values of status A may be obtained with the gray card on the positive film.
(The aim density values are based on the assumption that the film will be projected with a xenon lamp projector.)

R 1.10 G 1.05 B 1.05

○ Packaging Units and Perforations

Film Width	Film Length and Winding Type	Core / Spool	Shape, Pitch and Specification of Perforations
35mm	*610m/2000ft	35 x 75 mm core	KS-4. 750mm [ISO 491 : 1995]
	915m/3000ft	35 x 75 mm core	
	1220m/4000ft (box bin style package)	35 x 75 mm core	
	1830m/6000ft (box bin style package)	35 x 75 mm core	

Item marked with the symbol* is manufactured after receipt of orders

○ Analog Sound Track

Insert Fuji Filter SC-50 in the light path of the printer to record a sound image in the top two emulsion layers. The optimum density of the variable-area type sound track of the color positive film is determined by the combination of its density and the sound track density of the sound negative film. Obtain the optimum density of the variable-area type sound track by performing a cross modulation test. The sound track density of color positive film usually ranges from 1.1 to 1.6 when measured at a wavelength of 800nm.

○ Digital Sound Track

Refer to the specifications of each digital recording system.

● Processing

Fujicolor Positive Film ETERNA 3512 is designed to be processed in Process ECP-2D and ECP-2E for Eastman Color Print Film. The process steps of prebath and rem-jet removal & rinse may be omitted.

● Edge Markings

Film identification marks (FUJICOLOR, Type No, Lot No, Roll No, Slit No and Perforating Machine No) are printed as latent images. For edge markings, a magenta coloring is used in order not to interfere with the SDDS soundtracks.

● Raw Stock Storage

Like other color films, Fujicolor Positive Film ETERNA3512 may undergo certain changes in photographic properties when stored for extended periods. Since these changes can be accelerated, particularly through the action of heat and moisture, it is recommended that raw stock be stored at temperatures below 13˚C (55.4˚F) in the package. A package containing film that has been refrigerated should remain sealed until it reaches equilibrium with the ambient temperature. If packages are opened too soon, moisture from outside the package may condense on the film surface before and during use.

● Exposed Film Handling

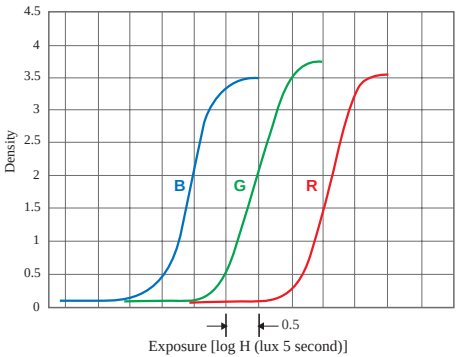
Exposed films should be processed as soon as possible. If exposed films cannot be processed within 3 days of exposure, they should be stored below 10˚C (50˚F) and processed as soon as circumstances permit.

● Processed Film Storage

Fujicolor Positive Film ETERNA 3512 is designed to resist color fading. However, to avoid changes in dye image due to high temperatures and humidities during prolonged storage, it is recommended that processed films be kept at a temperature of 15˚C (59˚F) with 30% to 40% RH for long-term storage (about 100 years), and at a temperature of 20˚C (68˚F) with 40% to 50% RH for medium-term storage (about 50 years). Furthermore, it is also recommended that processed films in storage should be checked by visual inspection for changes (e.g., deformation, color fading, adhesion, mold) at intervals of a few years.

Characteristic curves

Exposure : 2854K tungsten light source for 1/100 second with Fuji Filter SC-41 and color correction filte
Processing : Specified standardized conditions
Densitometry : Three color diffusion densities (status A)



In order to simulate conditions closest to practical use, exposure was made under a 2854K Tungsten light source, through CC-90Y and CC-60M print color correction filters and a Fuji SC-41 ultraviolet absorbing filter in combination. Processing was carried out under standard conditions and the three color densities (status A) were measured. The results of measurements are plotted as characteristic curves. Curves G and B are shifted 1.0 Log H to avoid overlapping.

FUJICOLOR POSITIVE FILM
ETERNA-CP 3514DI

35mm Type 3514DI / 16mm Type 3614DI



Advanced image quality and handling ease for total cinematic versatility.

● Film Base

The polyester (PET) safety base does not allow splicing with film cement. Use splicing tape or an ultrasonic splicing device for splicing.

● Safelight

This film should be handled at a distance of 1m ($3^1/_2$ft) or more from a 10-watt electric bulb by the use of a Fuji Safelight Filter N0.101A (dark orange) for color positive film. When the film is exposed to safelight for prolonged periods of time, a sufficient test should be performed to ensure safety.

● Printing

Aim Print Density: Normally expose a negative film normally to 18% reflectance gray card and process the negative film under standard conditions. Print the negative image of the gray card onto the Fujicolor positive film. Fine adjustments should then be made to the printer settings so that the following density values of status A may be obtained with the gray card on the positive film.
(The aim density values are based on the assumption that the film will be projected with a xenon lamp projector.)

R 1.10 G 1.05 B 1.05

○ Packaging Units and Perforations

Film Width	Film Length and Winding Type	Core / Spool	Shape, Pitch and Specification of Perforations
35mm	610m/2000ft	35 x 75 mm core	KS-4. 750mm [ISO 491 : 1995]
	915m/3000ft	35 x 75 mm core	
	1220m/4000ft (box bin style package)	35 x 75 mm core	
	1830m/6000ft (box bin style package)	35 x 75 mm core	
16mm	610m/2000ft x 2 (Single-perforated, type A winding)	16 x 75 mm core	1R-7. 620mm [ISO 69 : 1998]

○ Analog Sound Track

Insert Fuji Filter SC-50 in the light path of the printer to record a sound image in the top two emulsion layers. The optimum density of the variable-area type sound track of the color positive film is determined by the combination of its density and the sound track density of the sound negative film. Obtain the optimum density of the variable-area type sound track by performing a cross modulation test. The sound track density of color positive film usually ranges

○ Digital Sound Track

Refer to the specifications of each digital recording system.

● Processing

Fujicolor Positive Film ETERNA 3514DI is designed to be processed in Process ECP-2D and ECP-2E for Eastman Color Print Film. The process steps of prebath and rem-jet removal & rinse may be omitted.

● Edge Markings

Film identification marks (FUJICOLOR, Type No, Lot No, Roll No, Slit No and Perforating Machine No) are printed as latent images. For edge markings, a magenta coloring is used in order not to interfere with the SDDS soundtracks.

● Raw Stock Storage

Like other color films, Fujicolor Positive Film ETERNA 3514DI may undergo certain changes in photographic properties when stored for extended periods. Since these changes can be accelerated, particularly through the action of heat and moisture, it is recommended that raw stock be stored at temperatures below 13˚C (55.4˚F) in the package. A package containing film that has been refrigerated should remain sealed until it reaches equilibrium with the ambient temperature. If packages are opened too soon, moisture from outside the package may condense on the film surface before and during use.

● Exposed Film Handling

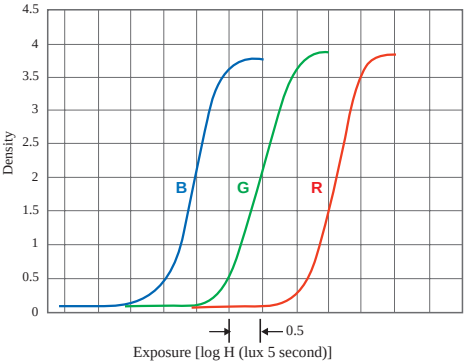
Exposed films should be processed as soon as possible. If exposed films cannot be processed within 3 days of exposure, they should be stored below 10˚C (50˚F) and processed as soon as circumstances permit.

● Processed Film Storage

Fujicolor Positive Film ETERNA 3514DI is designed to resist color fading. However, to avoid changes in dye image due to high temperatures and humidities during prolonged storage, it is recommended that processed films be kept at a temperature of 15˚C (59˚F) with 30% to 40% RH for long-term storage (about 100 years), and at a temperature of 20˚C (68˚F) with 40% to 50% RH for medium-term storage (about 50 years). Furthermore, it is also recommended that processed films in storage should be checked by visual inspection for changes (e.g., deformation, color fading, adhesion, mold) at intervals of a few years.

Characteristic curves

Exposure : 2854K tungsten light source for 1/100 second with Fuji Filter SC-41 and color correction filter
Processing : Specified standardized conditions
Densitometry : Three color diffusion densities (status A)



In order to simulate conditions closest to practical use, exposure was made under a 2854K Tungsten light source, through CC-90Y and CC-60M print color correction filters and a Fuji SC-41 ultraviolet absorbing filter in combination. Processing was carried out under standard conditions and the three color densities (status A) were measured. The results of measurements are plotted as characteristic curves. Curves G and B are shifted 1.0 Log H to avoid overlapping.

FUJICOLOR POSITIVE FILM
ETERNA-CP 3523XD

35mm Type 3523XD



Crisp blacks and remarkable shadow detail.

● Film Base

The polyester (PET) safety base does not allow splicing with film cement. Use splicing tape or an ultrasonic splicing device for splicing.

● Safelight

This film should be handled at a distance of 1m ($3^1/_2$ft) or more from a 10-watt electric bulb by the use of a Fuji Safelight Filter N0.101A (dark orange) for color positive film. When the film is exposed to safelight for prolonged periods of time, a sufficient test should be performed to ensure safety.

● Printing

Aim Print Density: Normally expose a negative film normally to 18% reflectance gray card and process the negative film under standard conditions. Print the negative image of the gray card onto the Fujicolor positive film. Fine adjustments should then be made to the printer settings so that the following density values of status A may be obtained with the gray card on the positive film. (The aim density values are based on the assumption that the film will be projected with a xenon lamp projector.)

R 1.10 G 1.05 B 1.05

○ Packaging Units and Perforations

Film Width	Film Length and Winding Type	Core / Spool	Shape, Pitch and Specification of Perforations
35mm	1220m / 4000ft (box bin style package)	35 x 75 mm core	KS-4. 750mm [ISO 491 : 1995]
	1830m / 6000ft (box bin style package)	35 x 75 mm core	

○ Analog Sound Track

Insert Fuji Filter SC-50 in the light path of the printer to record a sound image in the top two emulsion layers. The optimum density of the variable-area type sound track of the color positive film is determined by the combination of its density and the sound track density of the sound negative film. Obtain the optimum density of the variable-area type sound track by performing a cross modulation test. The sound track density of color positive film usually ranges from 1.1 to 1.6 when measured at a wavelength of 800nm.

○ Digital Sound Track

Refer to the specifications of each digital recording system.

● Processing

Fujicolor Positive Film ETERNA 3523XD is designed to be processed in Process ECP-2D and ECP-2E for Eastman Color Print Film. The process steps of prebath and rem-jet removal & rinse may be omitted.

● Edge Markings

Film identification marks (FUJICOLOR, Type No, Lot No, Roll No, Slit No and Perforating Machine No) are printed as latent images. For edge markings, a magenta coloring is used in order not to interfere with the SDDS soundtracks.

● Raw Stock Storage

Like other color films, Fujicolor Positive Film ETERNA 3523XD may undergo certain changes in photographic properties when stored for extended periods. Since these changes can be accelerated, particularly through the action of heat and moisture, it is recommended that raw stock be stored at temperatures below 13˚C (55.4˚F) in the package. A package containing film that has been refrigerated should remain sealed until it reaches equilibrium with the ambient temperature. If packages are opened too soon, moisture from outside the package may condense on the film surface before and during use.

● Exposed Film Handling

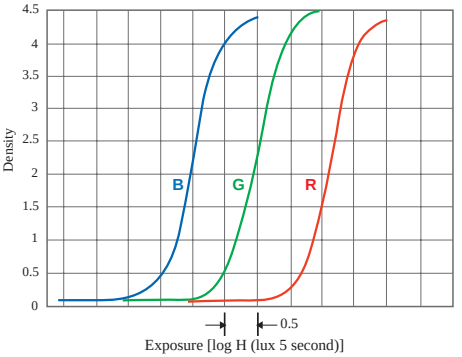
Exposed films should be processed as soon as possible. If exposed films cannot be processed within 3 days of exposure, they should be stored below 10˚C (50˚F) and processed as soon as circumstances permit.

● Processed Film Storage

Fujicolor Positive Film ETERNA 3523XD is designed to resist color fading. However, to avoid changes in dye image due to high temperatures and humidities during prolonged storage, it is recommended that processed films be kept at a temperature of 15˚C (59˚F) with 30% to 40% RH for long-term storage (about 100 years), and at a temperature of 20˚C (68˚F) with 40% to 50% RH for medium-term storage (about 50 years). Furthermore, it is also recommended that processed films in storage should be checked by visual inspection for changes (e.g., deformation, color fading, adhesion, mold) at intervals of a few years.

Characteristic curves

Exposure : 2854K tungsten light source for 1/100 second with Fuji Filter SC-41 and color correction filter
Processing : Specified standardized conditions
Densitometry : Three color diffusion densities (status A)

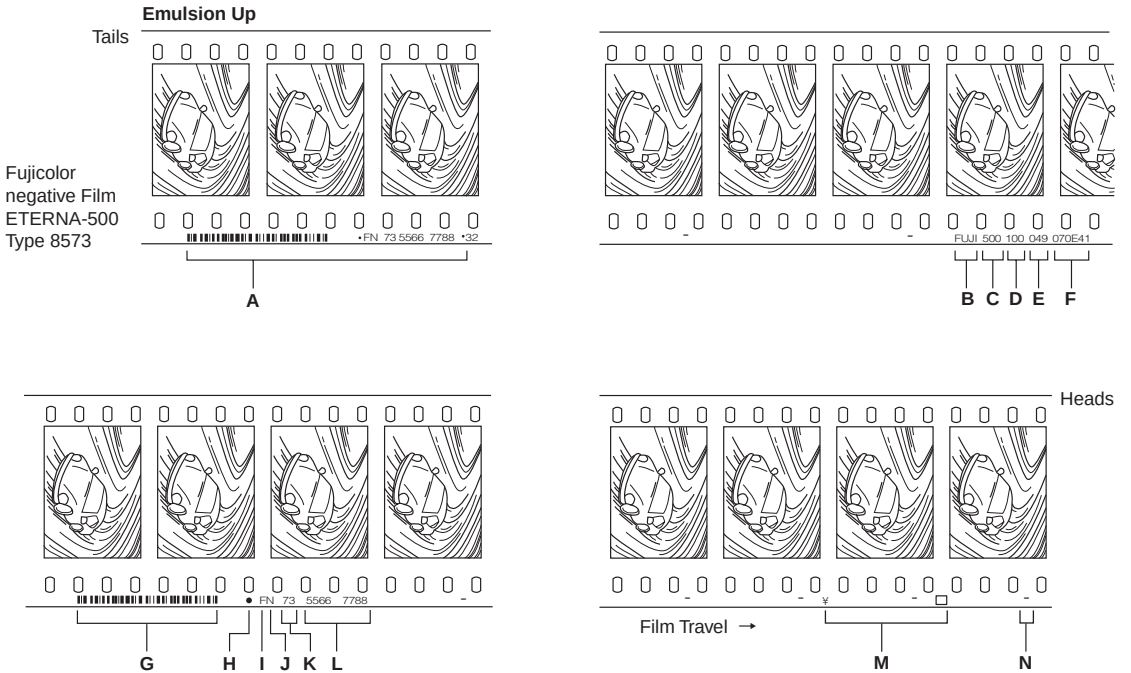


In order to simulate conditions closest to practical use, exposure was made under a 2854K Tungsten light source, through CC-90Y and CC-60M print color correction filters and a Fuji SC-41 ultraviolet absorbing filter in combination. Processing was carried out under standard conditions and the three color densities (status A) were measured. The results of measurements are plotted as characteristic curves. Curves G and B are shifted 1.0 Log H to avoid overlapping.

Edge Markings of 35mm Film

35mm Film

(Example : Fujicolor Negative Film ETERNA-500 Type 8573)



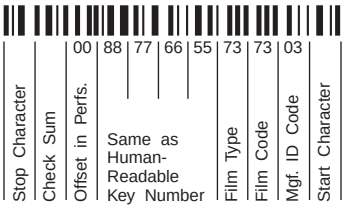
Edge Markings of 35mm Film

A Mid-Foot Key Number and MR. CODE
The number and barcode with 32-perforation offset are placed at the center between every normal key number and MR. CODE.
Helps identify short scenes. The numbers are smaller than nomal key numbers.

< Product Information >

B Manufacturer's Name
C Film Name
D Emulsion number
E Master Roll Number
F Manufacturer's Code

G MR. CODE
Machine-readable barcode containing manufacturer ID code, film code, film type, key number and offset in perforations.



H Zero-Frame Reference Mark
The frame above this mark (·) is identified as the zero-frame specified by both key number and MR. CODE.

I Manufacturer Identification Code
Letter F identifies films manufactured by FUJIFILM Corporation.

J Film Ideintification Code
Letter N identifies Fujicolor and Black & White Negative Films.
Letter I identifies Fujicolor Intermediate Film.

K Film Type Identification Number
This 2-digit number corresponds to the last two digits of film type number.

L Key Number
Human-readable, 8-digit number.
Increments every one foot (64 perforations).

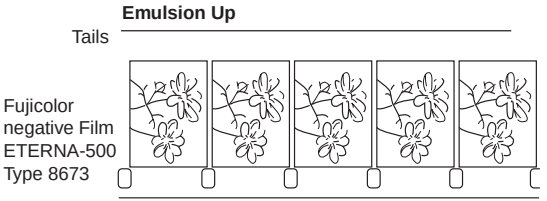
M Matching Check Symbols
Randomly selected and inserted symbols (in pairs) help verify that the negative and the working print are properly matched.

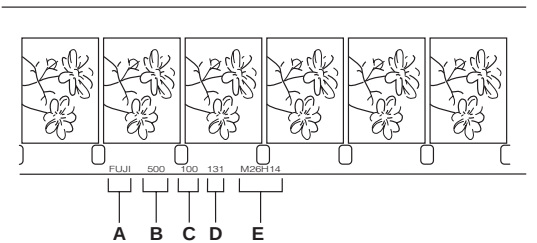
N Frame Index Mark
This mark (-) at intervals of 4 perforations is helpful in finding the position of the frame line in dark scenes. This is printed without being overlapped on any other edgeprint marking.

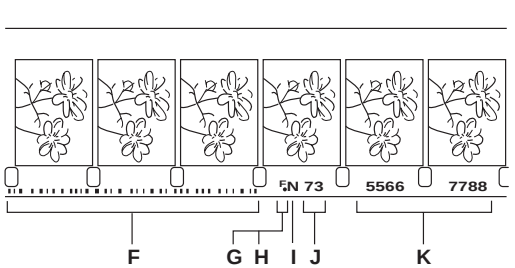
Edge Markings of 16mm Film

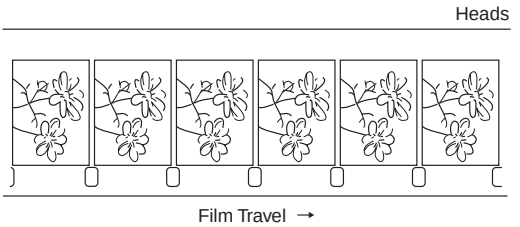
16mm Film

(Example : Fujicolor Negative Film ETERNA-500 Type 8673)







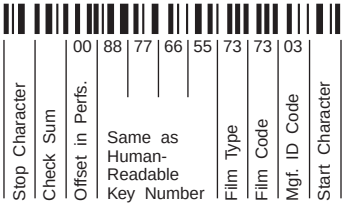


Edge Markings of 16mm Film

< Product Information >

A Manufacturer's Name
B Film Name
C Emulsion number
D Master Roll Number
E Manufacturer's Code

F MR. CODE
Machine-readable barcode containing manufacturer ID code, film code, film type, key number and offset in perforations.



G Zero-Frame Reference Mark
The frame above this mark (•) is identified as the zero-frame specified by both key number and MR. CODE.

H Manufacturer Identification Code
Letter F identifies films manufactured by FUJIFILM Corporation.

I Film Ideintification Code
Letter N identifies Fujicolor and Black & White Negative Films.
Letter I identifies Fujicolor Intermediate Film.

J Film Type Identification Number
This 2-digit number corresponds to the last two digits of film type number.

K Key Number
Human-readable, 8-digit number.
Increments every 1/2 foot (20 perforations).

FILM STORAGE

1. RAW STOCK STORAGE

Photographic properties of films change gradually as they age.
Changes occur in speed and contrast. Also, fog is often increased.

1-1 Effects of Humidity and Temperature

In Case of Raw Film

Since motion picture raw stock is contained in tapesealed cans to shut out moisture, no special precautions are necessary with regard to humidity until the sealing tape is removed. Once the stock is unsealed, it is recommended to use it up soon. Excessively high humidity should be avoided, because the packaging cardboard and label may become moisture laden or the can may corrode.

Color camera films generally maintain their initial quality for about one year when stored at 10°C (50°F) or below, and black-and-white films at 13°C (55.4°F) or below.
When stored at nomal room temperatures (20-25°C / 68-77°F), they undergo gradual changes in photographic properties. If stored at higher temperatures, the changes will occur more rapidly. In such case, film should be kept in containers made of heat insulating materials.

When camera is used under strong sunlight, the temperature inside the magazine may become 20°C (36°F) higher than the outside ambient temperature. In certain cases, the temperature may rise to a sizzling 50°C (122°F). If a white cloth magazine cover is used, it will lower the magazine temperature by approximately 10°C (18°F).

In Case of Print Film

On the other hand, print films are less subject to high temperatures than camera films as temperature and humidity are relatively well controlled. Further, changes in speed can be corrected during printing. For best results, however, it is necessary that black-and-white positive films, duplicating films and color positive films be stored at temperatures of 13°C (55.4°F) or below and color intermediate films at 10°C (50°F) or below.

Film Adhesion

Under high temperature and humidity conditions, moisture absorbing emulsion surfaces are liable to adhere to the film back. Such adhesion easily results in fog and static marks and the emulsion surface may be deformed.

In addition, adhering films may not smoothly be transported through a camera or printer. If films are coated with backing layers, some of the backing may be stripped off and adhere to the emulsion surface, producing spots, mottling and other defects in processed films. Raw stock maintained under cold storage should be left at room temperature for the prescribed

period to avoid moisture condensation which would result in spots and mottling. Raw stock removed from cold storage should remain sealed in the metal can until it comes into equilibrium with atmospheric temperatures. Figures 31 and 32 provide a quick guide to calculate the time that raw stock should remain in their sealed cans after removal from refrigeration at 5°C (41°F) and at –20°C (–4°F).

1-2 Effects of Harmful Gases, Chemicals and Radiation

When handling film stocks, sufficient care should be paid to protect them from harmful gases and chemicals. Gases, such as formaldehyde, hydrogen sulfide, sulfurous acid, ammonia, turpentine oil, and mercury vapors are detrimental to motion picture films. Certain kinds of silicone oil and silicone grease are particularly harmful.

In addition, all raw stocks, especially high-speed materials, need to be protected from X-rays and other radiations, for all radiations cause heavy fog. When passing through inspection gates at airports, radiation exposure should be avoided.
To prevent X-ray dosage, raw stocks should be kept in X-ray-proof cases, such as Fuji Film Carrying Cases.
Fig. 33 indicates the relationship between the standard packaged Fujicolor Negative Film ETERNA 500 and X-ray dosage.
Cosmic rays and natural radiation may also cause a gradual increase in film fog.

2. EXPOSED FILM STORAGE

Exposed films require far greater care than raw stocks.
Exposed films should be processed as quickly as possible. This is because latent images produced by exposure changes grow or fade with time, and such changes accelerate under high temperature and humidity conditions.
Changes in latent images do not always take place uniformly in the highlight to shadow areas, and gradation may also vary depending on the case. With color films, the rate of latent image change differs from one emulsion layer to the other causing the mismatch of color balance.

When exposed but unprocessed films are to be stored for extended periods, they must be kept in cold storage. The specific storage conditions are indicated in the respective data sheets. Even for short periods, they should be kept below 25°C (77°F).

In the case of release print films, on the other hand, it is desirable to process them within 3 days of printing. If they cannot be processed within the specified period, it is necessary to store them at temperature of 10°C (50°F) or below.

Fig. 29 Temperature Inside Cars Parked Under Strong Sunlight

Car Color : Silver Gray
Window : Fully Closed
Weather : Fine (Summer Season in Japan)

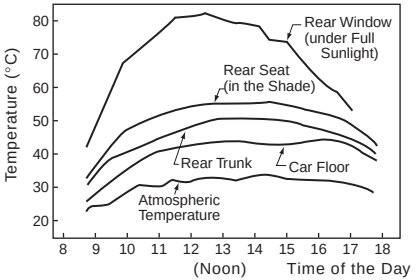


Fig. 30 Temperature Inside Camera Magazines Used Under Strong Sunlight

Weather : Fine (Summer Season in Japan)

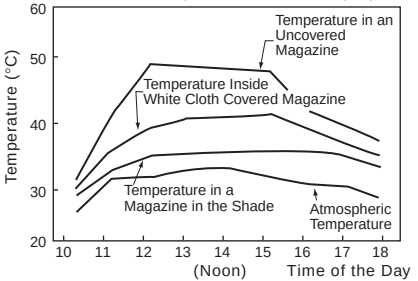


Fig. 33 Relationship Between X-ray Dosage and Fujicolor Negative Film ETERNA 500 Fogging

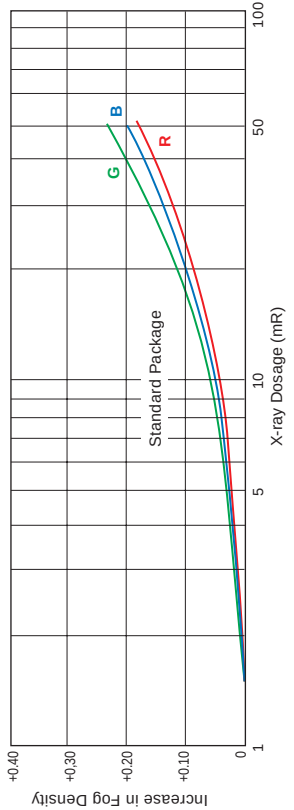
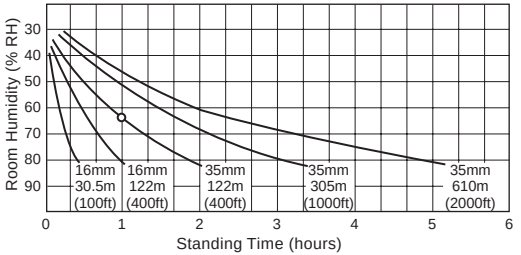


Table 5 Airport Inspection X-ray Exposure Safety Limits for Color Negative Films

Type of Film	Exposure Index	Acceptable Number of X-ray Inspections
Fujicolor Negative Film ETERNA 500	500	4
Fujicolor Negative Film ETERNA 250	250	8
Fujicolor Negative Film ETERNA Vivid 160	160	12

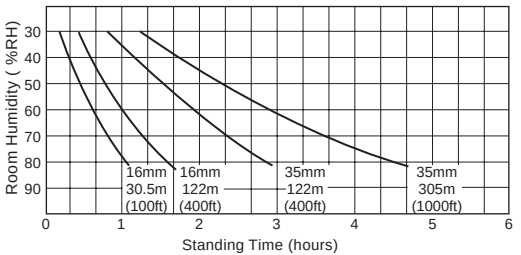
(The X-ray exposure safety limits above are based on the assumption that the dosage per inspection is 0.3 mR for films in standard packages.)

Fig. 31 Standing Time Required after Removal from Refrigeration



Refrigerator at
5˚C (41˚F) → Room at 24˚C (75.2˚F)
Temperature Difference : 19˚C (34.2˚F)

Fig. 32 Standing Time Required after Removal from Freezer



Freezer at
–20˚C (–4˚F) → Room at 24˚C (75.2˚F)
Temperature Difference : 44˚C (79.2˚F)

How to Read Figs. 31 and 32

The required standing times shown were derived under the following conditions.

Film Size	16mm and 35mm
Film Length	30.5 m (100 ft), 122 m (400 ft), 305 m (1,000 ft), 610 m (2,000 ft)
Temperature Difference	19°C (34.2°F) When raw stock is transferred from a refrigerator at 5°C (41°F) to a room temperature at 24°C (75.2°F)
Temperature Difference	44°C (79.2°F) When raw stock is transferred from a freezer at –20°C (–4°F) to a room temperature at 24°C (75.2°F)
Room Humidity	30 to 90% RH
Standing Condition	Separated from each other.

If a 122-m (400-ft) roll 35mm film is taken out of a refrigerator at 5°C (41°F) into a room at 24°C (75°F) with 63% RH, determination of the length of time during which should be kept sealed before it comes into equilibrium with the room temperature is as follows. Locate the 63% RH point on the vertical axis of the graph shown in Fig. 31, extend a horizontal line from this point to the right straight across the graph, and read off the time at its intersection (indicated by an open circle) with the third curved line. It can be seen that for the case cited the film would be brought into equalibrium with room conditions if allowed to stand for 1 hour or longer before unsealing.

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＜Fujifilm Abroad＞

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	European Motion Picture Division 17 Soho Square, London, W1D 3QJ, U.K.
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Malaysia	**FUJIFILM (Malaysia) Sdn. Bhd.** 22, Jalan Jurunilai U1/20, Seksyen U1, Hicom-Glenmarie Industrial Park, 40150 Shah Alam, Selangor Darul Ehsan, Malaysia http://www.fujifilm.com.my/
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MOTION PICTURE FILM

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