

Camera and Lens Evaluation

The new color negative emulsions designed for cinematography are distinguished by high speed, wide exposure latitude, high resolution, and low granularity. To exploit to full advantage their state-of-the-art performance characteristics, a camera/lens "system" must function faultlessly, with all components maintained to design specifications.

PRINCIPAL CONSIDERATIONS: The optical and mechanical behavior of the lens, the adequacy of the lens mount, the trueness of the reflex view-finder, and the registration of the camera.

TESTING: Facilities for camera and lens testing and evaluation are available at camera service centers, and at some camera rental and supply houses. DuArt, upon prior arrangement with a laboratory technical supervisor, will process and print camera and lens tests at no charge.

Laboratory Services

35MM DAILIES: Selected takes of the processed 35mm negative are assembled for printing in the sequence they appear on the camera report, in rolls up to 1,000 feet. Each take is timed separately by computer frame count (no notches or tabs) to provide a pleasing print. Your timing instructions, indicated on the camera reports, and by use of gray scales, help us meet your requirements. The charge is for a one-lite daily.

16MM DAILIES: The processed 16mm negative rolls are assembled and identified for printing in numerical order, in rolls not exceeding 1,200 feet. All takes are printed to protect the original from excessive handling. As with 35mm, our "one-lite" dailies are re timed by computer frame count (no notches or tabs) for a pleasing picture and are charged at the price of a one-lite daily.

Best light or actual one-lite dailies are arranged through our Dailies Technical Service Department. Fully timed dailies are available upon request.

EXPOSURE REPORTS: Printouts of the timing lights are delivered with the daily print.

This printout is a valuable tool for evaluating the exposure of the negative. The printout indicates, by successive footage and frame count, each set of red, green and blue timing lights used to make the workprint. Comparing these timing lights with the related workprint images can help Cinematographer to evaluate the images being recorded.

EXPOSURE REPORT SAMPLE

CUE	SCENE	FOOTAGE	RED	GREEN	BLUE
1	1	2:08	10	10	10
2	2	15:08	24	35	28
3	3	256:02	26	34	29
4	4	554:04	24	36	29
5	5	692:01	24	35	29
6	6	727:10	26	34	29

Contact our Technical Representatives for assistance in the analysis of timing lights on the exposure report.

VIDEO DAILIES TIMING REPORTS: This report will give the Cinematographer the ability to evaluate the exposures while viewing the day's shoot on tape. There is a charge for this service as no film daily is made. For more information, please refer to page 10 of our "Video Dailies" brochure.

NEGATIVE REPORTS: The Dailies Technical Service Dept. immediately contacts the Cinematographer after the dailies have been screened if there are any negative problems, either physical or photographic. Arrangements can be made with the Dailies Technical Service Department for daily telephone reports to the Cinematographer to guide and support him on location. All dailies are screened by the lab. **35MM DAILIES ARE SCREENED AT NORMAL RUNNING SPEED.**

DAILIES-READY: Dailies are completed overnight. In 35mm, same day service "Daylighting" is available if scheduled in advance. All service arrangements are made with the Dailies Scheduling Department.

CUSTOMER SCREENING OF DAILIES: Scheduling must be made through the Dailies Technical Service Department. 35mm, Super 16mm and 16mm screenings: silent, regular or high speed, are available at no charge. Double system screenings of 35mm, Super 16mm and 16mm are available at a charge. Please contact the Sales Department for prices.

DELIVERIES: Normal procedure is for the customer to deliver and pick-up at the laboratory in New York. Messenger pick-up of dailies at the airport or other points can be arranged with our Shipping Department at customer's cost. Similarly, shipment via a range of couriers, can be arranged. In the Boston area, delivery and pick-up can be made at Boston Camera through our free courier service.

PUSH PROCESSING: Today's color negative film stocks are manufactured in a wide range of film speeds to avoid the need for push processing. However, dependent upon the amount of under-exposure and the lighting of the particular scene, a more pleasing picture can sometimes be made from a negative that has been force processed.

The amount of force processing should be determined by a photographic test. If you are unable to test before shooting, provide a representative end test to determine how your film should be developed, and indicate on the can the amount of under-exposure. When possible, discuss with our Technical Representative the degree of under-exposure to help determine the amount of force processing.

PULL PROCESSING: When over-exposing color negative, pull processing can be used to lower the contrast, and to lower the apparent graininess of the picture. The appropriate amount of over-exposure and the corresponding amount of pull processing should be determined by a photographic test. When possible, discuss your intent with our Technical Representative.

FLASHING: Arrangements can be made with our Technical Service Department for either neutral flashing to lower contrast or color flashing to create specific moods or effects. Testing and special procedures are required for flashing.

FLUORESCENT LIGHTS: The latitude of a color negative enables the laboratory to compensate in printing for the non-use of filters. Camera filters that correct for fluorescent lighting greatly reduce the exposure index of the film. Don't use these filters if the result is an under-exposed negative.

AUDIO FOR FILM DAILIES:

1. Transfer of audio from 1/4", DAT, standard sync cassettes: 50 Hz, 60 Hz, 59.97 Hz; 24, 25, 29.97 and 30 frames per second to 16mm edge, center, EBU; 35mm stripe.
2. Syncing of workprint and sprocketed mag.
3. Transfer and print Aaton Time Code and SMPTE Time Code.

AUDIO FOR VIDEO DAILIES:

See our brochure "Audio for Video Dailies."

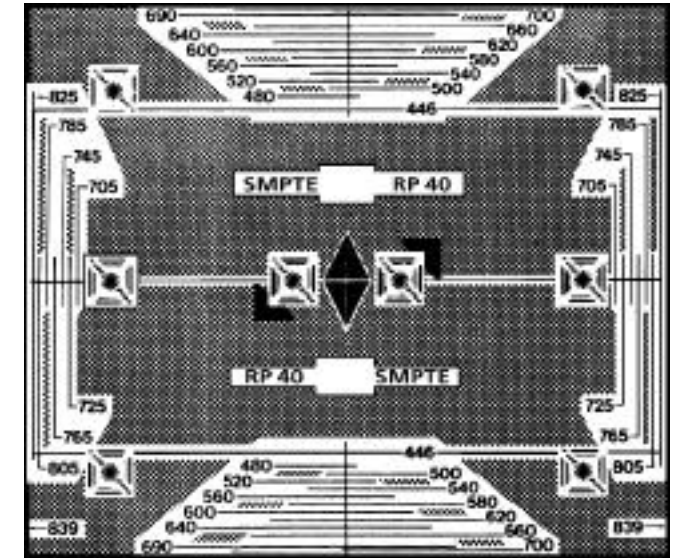
VIDEO DAILIES SERVICES:

See our brochure "Video Dailies."

DAILIES FOCUS LEADER: At the head of all 35mm dailies, and 16mm dailies upon request, DuArt includes a focus leader based on the versatile SMPTE RP 40 test film.

This film is precisely reproduced by pin-registration on an optical printer and the indicated dimensions of the 35mm leader are exact. Using this leader and the table below, projector apertures can be centered and also evaluated for proper cutoff.

SMPTE RP 40



For 16mm, DuArt produces a special reduced version of the 35mm RP 40. It's dimensions are not to scale but are accurately proportioned for 16mm. This leader, along with the table of 35mm dimensions below, becomes a useful tool for marking flatbed screens for TV-safe action or if a blow-up is anticipated for 1.85 projection.

SMPTE AMERICAN NATIONAL STANDARDS

35mm	% Academy Height	% Academy Width	% Academy Area	Aspect Ratio	Dimensions (inches)
Academy (1.33)	100	100	100	1.38	.868 x .631
1.33 Proj.	95	95	90	1.38	.825 x .600
1.66 Proj.	79	95	75	1.66	.825 x .497
1.85 Proj.	71	95	67	1.85	.825 x .446
TV Scanned	94	91	86	1.33	.792 x .594
TV Safe Action	85	82	70	1.33	.713 x .535
TV Safe Title	75	73	55	1.33	.630 x .475

ITEMS SUPPLIED AT NO COST

Camera reports and exposed negative can labels, cans, cores and black bags, 16mm daylight spools: 100, 200 and 400 foot (at no cost when available)

FOR SUPPLIES, CALL THE DAILIES DEPARTMENT.

Recommended Procedures

The exposed film should be placed in a black bag and in the same can from which it was removed. If the same can is not used, be sure that the proper raw stock identification is on the new can, and that all other markings are removed. When the film has been placed in the bag and can, tape the can securely around the edge where the top and the bottom overlap and clearly mark EXPOSED. In addition, identify each can with customer name, job title, roll number and processing instructions. Film for processing should be sent to the laboratory with a written purchase order containing:

1. Customer's Name, Address and Telephone Number
2. Telephone Number and Name of Person Serving as Laboratory Contact
3. Job Title
4. Number of Rolls, Roll Numbers, Film Length and Type
5. Processing Instructions
6. Complete Shipping Instructions, Including Destination, Carrier and Insurance Requirements
7. Indicate if Original Negative is to be Held or Returned with Dailies
8. C.O.D. Accounts should Include a 50% Deposit

Suggestions

- Unexposed negative film should be stored in a cool place, at 55°F or less.
- Do not untape can until ready to load magazine.
- Do not untape can when film is cold. Allow time for film to reach ambient temperature to prevent moisture condensation.
- Daylight spools must be loaded or unloaded in subdued light.
- Avoid using rewound raw stock because rewinding places the latent edge numbers in descending order on the opposite edge of the film.
- Always ship film to lab on a core, without a core film may be damaged. A collapsible camera core should be replaced with a plastic core.
- Camera film should be processed as soon as possible after exposure. If there is a delay, keep film as cold as possible.

- Undeveloped film should not be stored or shipped near radioactive materials. Use warning labels on package.
- Daily negatives are stored under job title. Maintain the same job title throughout your production.
- Never repeat a roll number in the same production.
- The laboratory assumes that end tests are at the outside of the roll unless otherwise noted.
- If you suspect that film has been physically damaged during shooting, identify the camera roll and supply any information you have of possible damage. This is to insure the safety of the undamaged film.
- Super 16mm original submitted for processing should be identified on the can.
- Check your printed edge numbers for legibility and sync before starting to cut.
- For detailed information about storage of unexposed, exposed, unprocessed and processed film, consult film manufacturer.

Color Negative Films		Exposure Indices (i.e.)		Camera Filters (Kodak Wratten)	
35mm	16mm	Tungsten (3200K)	Daylight (5500K)	Tungsten (3200K)	Daylight (5500K)
EASTMAN					
5245	7245	12	50	80A	NONE
5248	7248	100	64	NONE	85
5274	7274	200	125	NONE	85
5293	7293	200	125	NONE	85
5246	7246	64	250	80A	NONE
5277	7277	320	200	NONE	85
5279	7279	500	320	NONE	85
*5620	*7620	640	400	NONE	85
5298	N/A	500	320	NONE	85
5289	7289	800	500	NONE	85
* THIS IS SPECIAL FILM FOR VIDEO TRANSFER ONLY - NOT TO BE PRINTED					
FUJI					
8521	8621	16	64	80A	NONE
8531	8631	125	80	NONE	85
8551	8651	250	160	NONE	85
8561	8661	64	250	80A	NONE
8571	8671	500	320	NONE	85

CUSTOMER DIRECTORY

SALES	Frank Bucci David G. Fisher Matt Luxenberg Diandre Ruppert Linda Young	ext.669 ext.516 ext.637 ext.541 ext.680
(HABLA ESPAÑOL)		
FILM DAILIES (DIAL 1)		
35MM	John Franek Steve Blakely	
16MM	Al Pierce	
COMMERCIAL DAILIES (DIAL 1)		
Day	Mona Jackson Al Pierce Domenic Rom	
Midnight	Allen Hart Jack Tumale	
NIGHT SERVICE (DIAL 1)		
Afternoon & Evening	Allen Hart	
Midnight	Bob Renner Rick Anthony	
SOUND DAILIES (DIAL 5)		
Sound Transfer/Audio Layback	Joe Monge	
Night Service	ext.2	
VIDEO DAILIES (DIAL 2)		
Facility Manager	Joe Monge	
Operations Manager	Michael Leighton	
Scheduling	Dennis DeJesus	ext.715
Commercial Scheduling	Mona Jackson	ext.681
Evening	Peter Liveris	
Midnight	Jack Tumale	
Direct Dial Daytime	212 757 0801	
SHIPPING		
Film Shipping	8th Floor	ext.500
Video Shipping	1st Floor	ext.652
ADMINISTRATIVE SERVICES		
Credit Manager	Paul Juszczak	ext.576
Account Billing	Gloria Monge Haydee Tanti	ext.667 ext.515
C.O.D. Billing - Film	Monica Jenkins	ext.621
C.O.D. Billing - Video	Mary Amaker	ext.646
DU ART Boston/Free Courier Service	617 277 2200	
DU ART Toll Free	800 52 DuArt (except NY CT NJ)	
DU ART FILM AND VIDEO	245 West 55th Street, New York, New York 10019	
PHONE	212 757 4580	
FAXES		
Film Dailies	212 757 5774	
Film Finish and Sales	212 262 3381	
Sound	212 977 7448	
Video	212 977 5609	
Credit	212 333 7647	
E-mail	sales@duart.com	
Web	www.duart.com	



Cinematographer's lab guide

film dailies
services
and
recommended
procedures