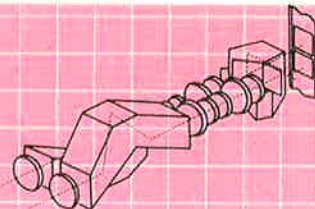


ESI 3-D



PRODUCT DESCRIPTION

Enhanced Spatial Imaging. A 70mm, 3-D effect that explodes off the screen into the audience. This single projector 3-D technology reaches beyond anything ever seen before. A guaranteed crowd pleaser that will bring them back again and again.

APPLICATIONS

ESI 3-D film presentations can be shown to a variety of audience types and sizes in locations such as amusement and theme parks; industrial, commercial and institutional trade shows; movie and stage theaters; museums; special exhibits; expositions; World's Fairs and other high traffic attractions.

FEATURES

Over/Under 70mm, 8 Perforation,
Pulldown, 2.21 to 1 Wide Film
Format

Single High Intensity Xenon
Light Source

Standard Camera Lenses
without Anamorphics

Single 70 mm Projector

Flat 3-D Screen
Aluminized/Perforated Fabric

Six (6) Discrete Channels of
Sound

3-D Glasses

BENEFITS

Superior picture resolution
sharpness. 250% larger than
35mm over/under and 86% larger
than 70mm side by side.

Greater screen brightness. Lower
operation and maintenance cost
than dual xenon lamp system.

Director has wide choice of
shooting lenses which adds
considerable variety to scene
compositon.

Lower cost of equipment, operation
and maintenance than dual projector
system. Focus adjustment and color
balance faster and easier.

Installs quickly and easily in most
existing theaters. Large enough
to impress audiences while still
maintaining Academy standard
brightness levels. Eliminates
distortion and eye discomfort
caused by curved 3-D screens.

Totally surrounds audiences with
realism. Provides infinite number
of sound effects.

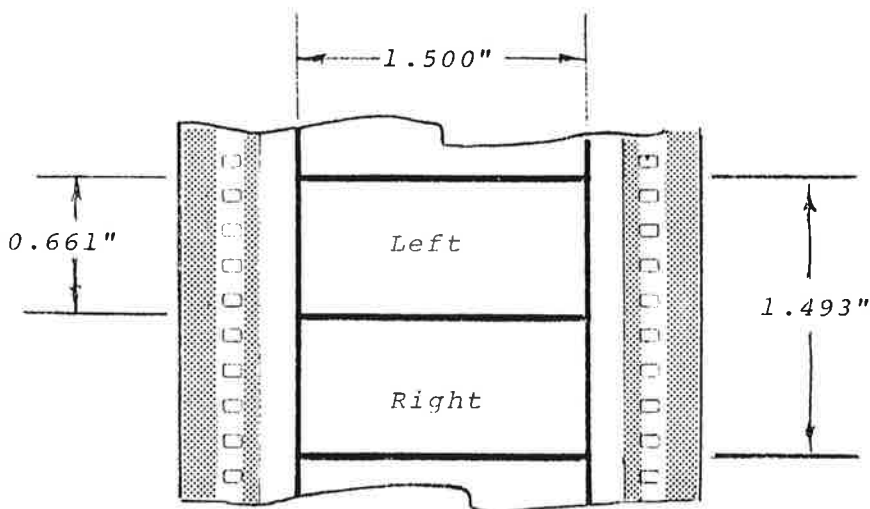
Maximizes promotional value of film
for operator and/or sponsor.



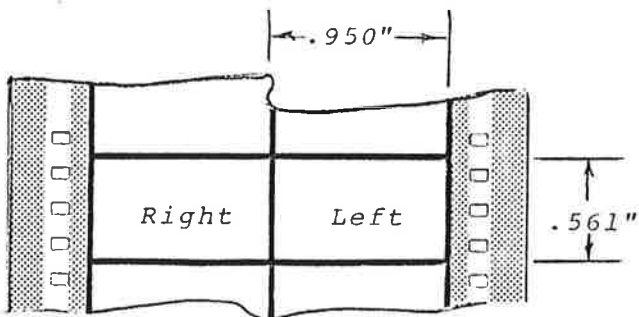
FILM FORMAT

The ESI 3-D System, with its exclusive 8-Perforation 70mm over/under format, increases picture resolution and sharpness and effectively overcomes the low level illumination problem typical of the 35mm format.

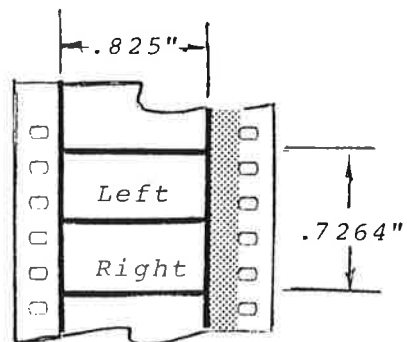
The image is approximately 235% larger than the widely used 35mm over/under frame. The results are enhanced image brilliance and resolution never achieved before in the three dimensional motion picture industry.



The ESI System
70mm



Side by Side
70mm



Over and Under
35mm

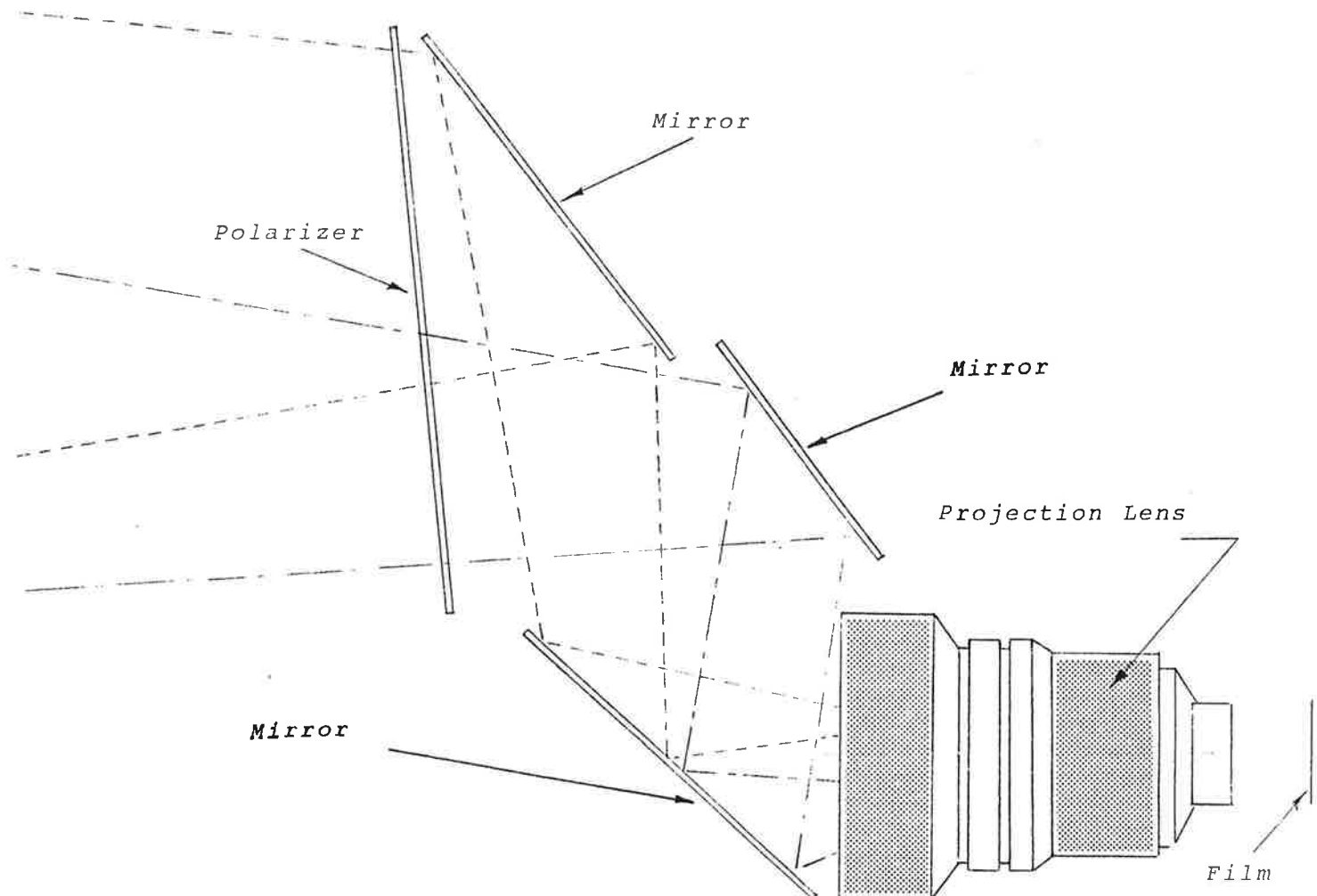
(actual sizes shown)

PROJECTION LENS

The projection lens system consists of a mirror/polarizer unit attached to a 70mm projection lens. Various focal length lenses for customer theater installations are readily available.

The higher intensity light source is vital to improving the image the audience sees because polarization under the best of conditions allows only 25% of the original light from the projector to reach the viewer's eyes. The increased ESI 3-D image size allows the use of higher intensity light sources, in the range of 7 KW to 12K without damaging the film.

The system employs a large, externally mounted polarizer. This arrangement eliminates the short life span created by heat on internally mounted polarizers. Beam separation and alignment for different projection distances are easily performed by external adjustments.



PROJECTION SCREEN

The projection screen is constructed of aluminized/perforated fabric mounted on a lightweight frame.

Large screen 3-D presentations (up to 55 ft. wide x 25 ft. high) meeting Academy standard brightness levels, in the order of 16 foot lamberts, are possible. Standard 35 ft. wide and smaller projection screens used in conjunction with 35mm format are no longer a limiting factor.

SCREEN SIZES VS PROJECTION DISTANCE & LENS FOCAL LENGTH

PROJ DIST	57.5mm	60.0mm	62.5mm	65.0mm	67.5mm	70.0mm	72.5mm	75.0mm	77.5mm
35'	23.2 X 10.3	22.2 X 9.8	21.3 X 9.4	20.5 X 9.1	19.8 X 8.7	19.1 X 8.4	18.4 X 8.1	17.8 X 7.9	17.2 X 7.6
40'	26.5 X 11.7	25.4 X 11.2	24.4 X 10.8	23.4 X 10.4	22.6 X 10.0	21.8 X 9.6	21.0 X 9.3	20.3 X 9.0	19.7 X 8.7
45'	29.8 X 13.2	28.6 X 12.6	27.4 X 12.1	26.4 X 11.7	25.4 X 11.2	24.5 X 10.8	23.6 X 10.5	22.9 X 10.1	22.1 X 9.8
50'	33.1 X 14.7	31.8 X 14.0	30.5 X 13.5	29.3 X 13.0	28.2 X 12.5	27.2 X 12.0	26.3 X 11.6	25.4 X 11.2	24.6 X 10.9
55'	36.4 X 16.1	34.9 X 15.5	33.5 X 14.8	32.2 X 14.3	31.0 X 13.7	29.9 X 13.2	28.9 X 12.8	27.9 X 12.4	27.0 X 12.0
60'	39.8 X 17.6	38.1 X 16.9	36.6 X 16.2	35.2 X 15.6	33.9 X 15.0	32.7 X 14.5	31.5 X 14.0	30.5 X 13.5	29.5 X 13.1
65'	43.1 X 19.1	41.3 X 18.3	39.6 X 17.5	38.1 X 16.9	36.7 X 16.2	35.4 X 15.7	34.2 X 15.1	33.0 X 14.6	32.0 X 14.1
70'	46.4 X 20.5	44.5 X 19.7	42.7 X 18.9	41.0 X 18.2	39.5 X 17.5	38.1 X 16.9	36.8 X 16.3	35.6 X 15.7	34.4 X 15.2
75'	49.7 X 22.0	47.6 X 21.1	45.7 X 20.2	44.0 X 19.5	42.3 X 18.7	40.8 X 18.1	39.4 X 17.4	38.1 X 16.9	36.9 X 16.3
80'	53.0 X 23.5	50.8 X 22.5	48.8 X 21.6	46.9 X 20.7	45.2 X 20.0	43.5 X 19.3	42.0 X 18.6	40.6 X 18.0	39.3 X 17.4
85'		54.0 X 23.9	51.8 X 22.9	49.8 X 22.0	48.0 X 21.2	46.3 X 20.5	44.7 X 19.8	43.2 X 19.1	41.8 X 18.5
90'			54.9 X 24.3	52.8 X 23.3	50.8 X 22.5	49.0 X 21.7	47.3 X 20.9	45.7 X 20.2	44.2 X 19.6
95'				55.7 X 24.6	53.6 X 23.7	51.7 X 22.9	49.9 X 22.1	48.3 X 21.4	46.7 X 20.7

ESI E-D-THEATER DESIGN

	<u>MODEL</u>				
	<u>ESI 35</u>	<u>ESI 40</u>	<u>ESI-45</u>	<u>ESI-50</u>	<u>ESI-55</u>
THEATER:					
Length	73'	82'	91'	100'	110'
Width	35'	40'	45'	50'	55'
Height	20'	22'	24'	26'	29'
Rake Angle	16.1°	15.9°	16.4°	15.9°	15.7°
Seating:					
No. Seats	224	288	399	484	600
No. Rows	16	18	21	22	24
Seats/Row	14	16	19	22	25
Seat Width	22"	22"	22"	22"	22"
Row Length	25.67'	29.33'	34.83'	40.33'	45.83'
Dist.to 1st Row	15'	18'	18'	22'	26'
Aisles:					
No/Location	2 Side	2 Side	2 Side	2 Side	2 Side
Width each Aisle	4.67'	5.34'	5.09'	4.84'	4.59'
Screen:					
Width	35'	40'	45'	50'	55'
Height	16'	18'	20'	22'	25'
Shape	Flat	Flat	Flat	Flat	Flat
Dist.off Floor	4'	4'	4'	4'	4'
Gain	2.2	2.2	2.2	2.2	2.2
Material:					
Perforated Aluminized Fabric w/Screen Frame & Mounting Hardware					
%Perforation	22%	22%	22%	22%	22%

PROJECTON:

Type 70mm, 8 Perforation, Vertical Pulldown, 24/Frames/Second
 3-D Effect Equally Divided Horizontal Over/Under Film Frame
 (4 Perforations each) creates a vertical separation equivalent to the inner-ocular distance between left and right eye.

Aspect Ratio	2.21/1	2.21/1	2.21/1	2.21/1	2.21/1
Throw Distance	63'	72'	81'	88'	98'
Lens Type	Wide Angle, Flat Field, 54mm, f2				
Lamphouse Wattage	7KW	7KW	7KW	12KW	12KW
Cooling Requirements	Forced Air			Forced Air & Chilled Water (approximately 57,000 BTU's)	

Projection Room

Length	10'	10'	10'	12'	12'
Width	10'	10'	10'	15'	15'
Height	9'	9'	9'	9'	9'

Equipment Room

Length	N/A	N/A	N/A	10'	10'
Width	N/A	N/A	N/A	10'	10'
Height	N/A	N/A	N/A	9'	9'

SOUND:

Channels	6	6	6	6	6
Dual Amplifiers	3	3	3	3	3
Watts/Channel	200	200	200	200	200
Total Watts	1200	1200	1200	1200	1200
No/Size Speakers	7/15"	7/15"	7/15"	7/15"	7/15"

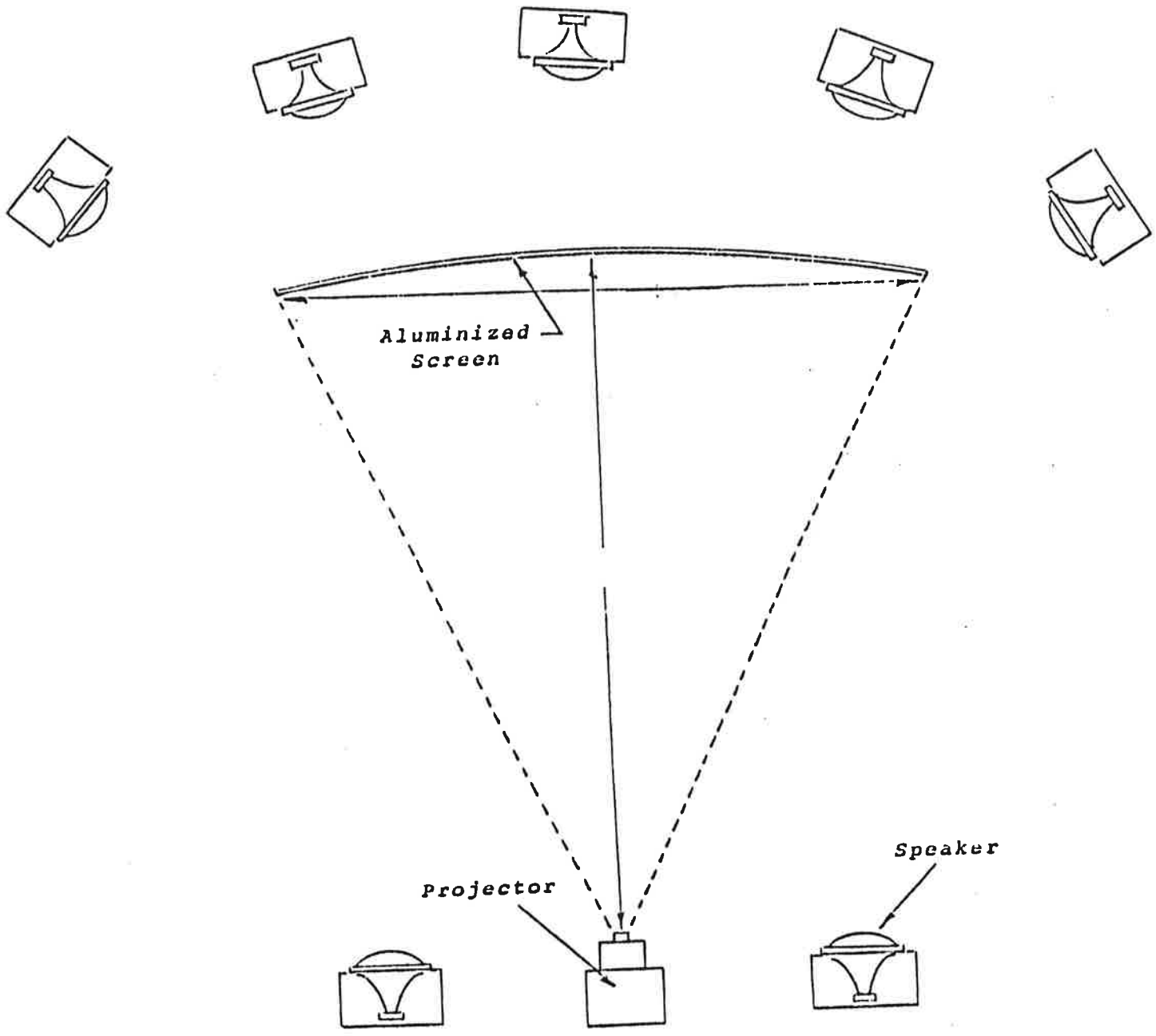
ELECTRICAL REQUIREMENTS:

60 Cycle:					
Kilowatts	9	9	9	15	15
Volts	220	220	220	220	220
Phase	3	3	3	3	3

50 Cycle:					
Kilowatts	9	9	9	15	15
Volts	380	380	380	380	380
Phase	3	3	3	3	3

Omni Films will also supply equipment designed for 350 and 440 Volt systems.

TYPICAL ESI 3-D THEATER INSTALLATION



3-D-GLASSES

Two choices in glasses. One maximizes promotional value of 3-D and one maximizes viewer comfort and cost efficiency.

Disposable cardboard glasses can be printed with the theater or sponsor logo. Glasses and message leave with the viewer. Cardboard glasses can be promoted at the theater and at sponsor tie-in locations. They will generate excitement and word-of-mouth advertising when pre-sold or given away. When stamped by a theater and returned to the sponsor, they can be redeemed for prizes with minimum purchase. This adds to the promotional value while increasing return visits to sponsor locations.

Recycleable plastic 3-D glasses combined with an Ultrasonic Eyeglass Cleaning System offers maximum viewer comfort and cost efficiency. Comfort design glasses are made of strong molded colored plastic for multiple use. 4800 pairs per hour can be cleaned, rinsed, sanitized and dried with an automatic Ultrasonic Eyeglass Cleaning System.

EQUIPMENT & SERVICES SUPPLIED

3-D Projection System with Lens & Polarizer
Aluminized/Perforated Fabric Screen with Frame & Mounting Hardware
Omnisound System - 6 Channels
Technical Representative Services during planning, design, installation, operator / maintenance training and after installation
Custom Film Production
Custom Film Titles for Sponsors or Exhibitors
Foreign Language Narrations
3-D Glasses

Options:

Theater Structure
Tape Deck
Alternate Screen Sizes
Spare Xenon Projection Lamps(s)
Seating