

CINEGATE *africa*
CAMERA · GRIPS · LIGHTING

RENTAL CATALOGUE 07/08



CONTENTS

	PAGE
OUR CONTACT INFORMATION	3
<u>CAMERA EQUIPMENT</u>	
35MM CAMERAS	4
35MM LENSES	10
16MM CAMERAS	11
16MM LENSES	15
FILTERS	16
<u>GRIPS EQUIPMENT</u>	
DOLLIES	21
HEADS	21
CRANES	22
LEGS	22
ACCESSORIES	22
<u>LIGHTING EQUIPMENT</u>	
COMPACT LIGHTING	23
SCRIM SETS	23
HEAD TO BALLAST CABLES (EXTRA)	23
CINEPAR LIGHTING	24
INCANDESCENT LIGHTING	25
KINOFLO LIGHTING	26
JOKER LIGHTING	27
BATTERY LIGHTING	27
SPECIAL PURPOSE LIGHTING AND ACCESSORIES	27
OVERHEAD SCRIM SETS	28
STANDS	30
GRIPS	31
FRAMES AND REFLECTORS	32
FLAGS AND YASHMACS	33
ACCESSORIES	33
GENERATION	34
<u>APPENDICES</u>	
CAMERA SPEED / TIME TABLES	37
CAMERA SPEED / TIME TABLES	37
SHUTTER ANGLE / EXPOSURE TABLES	39
VARIABLE CAMERA SPEED TABLES	40
FILTERS FOR COLOUR FILM	41
COMBINATION FILTERS	42
FILTER SIZES	43
EXPOSURE FACTOR TABLE	44
IMAGE CONTROL FILTERS	45
GROUND GLASS APETURE DIMENSIONS	46
FILM WARM UP TIMES	47
EXPOSURE CONVERSION TABLES	48
THE COLOUR OF LIGHT	50
KELVIN / MIRED TABLES	51
LIGHTING POWER TABLES	52
SETTING FOR FLICKERFREE HMI OPERATION	54
SHUTTER SPEEDS AT 24 FPS	56

CONTACT INFORMATION

Physical Address

Unit 8
Atlas Gardens
Contermans Kloof
Potsdam

Postal Address

P.O.Box 1125
Milnerton
7745

Contact Details

Phone	021 - 556 6474
Fax	021 – 556 6477
Email	info@cinagate.co.za

MOVIECAM COMPACT CAMERA KIT**R 9,200.00**

Integrated crystal control speed 12-32fps with speedbox
2-50fps forward and 12-32fps reverse

- 3 400 ft Magazines
- 1 Ground Glass/Gate Mask as requested
- 1 Movielight
- 2 Multipurpose Carrying Handles
- 1 Top-mount Magazine Adaptor
- 1 Padded Shoulder Rest
- 1 Adjustable Hand Grips (with ON/OFF)
- 1 Heated Eyepiece
- 1 Flexible Camera Lamp
- 1 Bridge & Balance Plate
- 1 Changing Bag
- 2 Battery Cables
- 3 24 v Batteries & Charger
- 1 Plastic Raincover
- 1 Hand Grip

MOVIECAM SL CAMERA KIT**R 9,200.00**

Integrated crystal control speed 12-32fps with speedbox
2-50fps forward and 12-32fps reverse

- 4 400 ft Magazines
- 2 Ground Glass/Gate Mask as requested
- 3 Movielight
- 1 Extension Eyepiece (2.4 x magnification)
- 1 Adaptor Block to allow use of Compact Mags
- 1 Padded Shoulder Rest
- 2 Adjustable Hand Grips (with ON/OFF)
- 2 Heated Eyepiece
- 2 Flexible Camera Lamp
- 2 Bridge & Balance Plate
- 4 Changing Bag
- 5 Battery Cables
- 6 24 v Batteries & Charger
- 1 Hand Grip
- 1 Lightweight Shoulder Plate

Normal discounts do not apply

MOVIECAM VTO

* B/W Video Assist Moviecam	R 2,200.00
* Moviecam Compact CEI Digital Colour	R 2,500.00
* 100% Video Finder for Steadicam	R 2,200.00

MOVIECAM ACCESSORIES

* Digital Readout for Moviecam Compact	R 350.00
* 120m/400ft Moviecam Magazine	R 900.00
* 120m/400ft Moviecam Light Magazine	R 900.00
* 120m/400ft Steadicam Magazine	R 900.00
* 120m/400ft Shoulder Magazine Moviecam	R 900.00
* 300m/1000ft Moviecam Magazine	R 1000.00
* 300m/1000ft Moviecam Light Magazine	R 1000.00
* Wet Weather Cover for Moviecam	R 125.00
* Syncro Box for Moviecam Compact	R 450.00
* Remote On/Off Cable for Moviecam	R 70.00
* Remote Control Box for Moviecam	R 350.00
* Remote Control Box Extension	R 20.00
* ZV Splitter 2 pin Fischer for Moviecam	R 70.00
* Follow Focus 19mm System	R 475.00
* Speed Box for Moviecam Compact	R 500.00
* Camera Grip Unit Moviecam	R 325.00

*** Normal discounts do not apply**

* **ARRI 535 B CAMERA KIT** R 9,200.00
3 - 60 fps Forward & Reverse

- 2 400 ft Magazines
- 1 Extension Viewfinder
- 1 Extension Eyepiece Leveller
- Variable Shutter
- 1 Ground Glass/ Arriglow
- 1 Gate Mask
- 1 Bridge Plate BP5 with Lens Support
- 1 Flexible Camera Lamp
- 1 Changing Bag
- 2 24 v Batteries & Cables
- 1 24 v Battery Charger
- 1 Plastic Rain cover

ARRI 535 VTO
* ARRI 535 IVS R 2,500.00
Denz 2000 R 1,600.00

ARRI 535 ACCESORIES

- 120m/400ft Magazine R 700.00
- 300m/1000ft Magazine R 800.00
- * 120m/400ft Steadicam Magazine R 750.00
- * Steadicam Top R 1,600.00
- Time Code Module R 200.00
- Hand Held Support [Universal] R 450.00
- * Heated Eyepiece R 210.00
- FF3 Follow Focus 19mm System R 475.00
- RS 4 Remote On Off R 75.00
- RS 4 Remote On Off Extension R 75.00
- CCU (Camera Control Unit) R 550.00
- 10m cable for CCU R 75.00
- RCU (Remote Control Unit) R 600.00
- 10m cable for RCU R 75.00
- * ESU (External Synch Unit) R 450.00

*** Normal discounts do not apply**

ARRI 435 ES Camera Kit **R 5,900.00**

Electronically Controlled Shutter Adjustment
1-150fps Forward and Reverse

- 2 400 ft Magazines
- 1 Arriglow
- 1 Ground Glass
- 1 Arri Sliding Base Support System (19mm)
- 1 Flexible Camera Lamp
- 1 Eyepiece Leveller
- 1 Changing Bag
- 2 19 mm Short Bars
- 1 24 v Battery Charger
- 1 Plastic Raincover
- 2 24 v Batteries & Cables

ARRI 435 VTO

ARRI 435 IVS **R 2,850.00**
Denz 2000 **R 1,600.00**

ARRI 435 Accessories

- 120m/400ft ARRI 435 Magazine **R 525.00**
- 300m/1000ft ARRI 435 Magazine **R 780.00**
- * Steadicam Magazine **R 600.00**
- Time Code Module **R 200.00**
- Extension Viewfinder FE3 **R 600.00**
- * Heated Eyepiece for ARRI 435 **R 270.00**
- * Wet Weather Cover ARRI 435 **R 125.00**
- ARRI Worklight **R 60.00**
- RS 4 Remote On Off **R 75.00**
- RCU (Remote Control Unit) **R 600.00**
- 10m cable for RCU **R 75.00**
- ZV for 24Vwith On/Off switch **R 60.00**
- * Steady Camera Top 100% **R 1,600.00**
- Follow Focus 19mm System **R 475.00**
- Video Top with Low Mode for ARRI 435 **R 1,650.00**
- * ESU (External Synch Unit) **R 535.00**

*** Normal discounts do not apply**

ARRI III MK2 Camera Kit

R 2,300.00

24 - 25 fps Crystal Control
5 - 50 fps Variable Reversible Motor

- 2 400 ft Magazines
- 1 Arri Sliding Base Support System (19mm)
Adjustable Shutter
- 1 Pistol Grip
- 1 Changing Bag
- 2 12 v Batteries & Cables
- 1 Plastic Raincover

ARRI III VTO

Denz 2000 VTO

R 1,600.00

Video Door with CEI 100% colour VTO

R 1,650.00

ARRI III Orientable Door

R 185.00

ARRI III Accessories

60m/200ft ARRI III Magazine	R 60.00
120m/400ft ARRI III Magazine	R 100.00
300m/1000ft ARRI III Magazine	R 250.00
ARRI III Extension Viewfinder	R 180.00
* Wet Weather Cover for ARRI III	R 125.00
CE Base	R 550.00
Precision Speed Control	R 550.00
NORRIS Intervalometer for ARRI III	R 1,050.00
ARRI III Worklight	R 60.00
ZV Splitter 11 pin Fischer	R 60.00
Follow Focus 19mm System	R 475.00
Remote On/Off Cable for 12V Cameras	R 75.00

*** Normal discounts do not apply**

BATTERIES

12 v, 16 v, 24 v, 28 v, 30 v R 60.00

CHARGERS

12 v, 16 v, 24 v, 28 v, 30 v R 72.00

BATTERY BELTS

12/5AH Battery Belt with Charger R 120.00

24/5AH Battery Belt with Charger R 120.00

CLIP ON MATTEBOXES

LMB-3 4x4 Clip On Mattebox R 250.00

LMB-5 4x5.6 Clip On Mattebox R 350.00

LMB-4 6x6 Clip On Mattebox R 585.00

PRODUCTION MATTEBOXES

MB 16 4x4 Mattebox Kit 19mm R 475.00

MB 18 4x5.6 Mattebox Kit 19mm R 475.00

MB 14 6x6 Mattebox Kit 19mm R 570.00

*** Normal discounts do not apply**

35 mm ULTRA PRIMES

16mm Zeiss Ultra T1.9	R 1,100.00
20mm Zeiss Ultra T1.9	R 1,100.00
24mm Zeiss Ultra T1.9	R 1,100.00
28mm Zeiss Ultra T1.9	R 1,100.00
32mm Zeiss Ultra T1.9	R 1,100.00
40mm Zeiss Ultra T1.9	R 1,100.00
50mm Zeiss Ultra T1.9	R 1,100.00
85mm Zeiss Ultra T1.9	R 1,100.00
100mm Zeiss Ultra T1.9	R 1,650.00
135mm Zeiss Ultra T1.9	R 1,650.00
10mm Zeiss Ultra T1.9	R 1,650.00
14mm Zeiss Ultra T1.9	R 1,650.00

35 mm COOKES

14mm S4 Cooke	R 1,840.00
18mm S4 Cooke	R 1,840.00
25mm S4 Cooke	R 1,660.00
32mm S4 Cooke	R 1,660.00
40mm S4 Cooke	R 1,840.00
50mm S4 Cooke	R 1,660.00
75mm S4 Cooke	R 1,660.00
100mm S4 Cooke	R 1,840.00
Cooke S4 Set (25, 32, 40, 50, 75)	R 6,640.00
135mm S4 Cooke	R 1,840.00

35 mm STANDARD

16mm Zeiss T2.1	R 525.00
20mm Zeiss T2.1	R 525.00
24mm Zeiss T2.1	R 450.00
28mm Zeiss T2.1	R 525.00
32mm Zeiss T2.1	R 450.00
40mm Zeiss T2.1	R 525.00
50mm Zeiss T2.1	R 450.00
85mm Zeiss T2.1	R 450.00
100mm Zeiss T2.1	R 600.00
135mm Zeiss T2.1	R 475.00
180mm Zeiss T2.1	R 450.00

*** Normal discounts do not apply**

35 mm MACROS

16mm ARRI Macro T2.1	R	950.00
24mm ARRI Macro T2.1	R	950.00
32mm ARRI Macro T2.1	R	950.00
40mm ARRI Macro T2.1	R	950.00
50mm ARRI Macro T2.8	R	950.00
60mm Zeiss Macro T3	R	650.00
* 100mm ARRI Macro T2.8	R	1250.00
* 200mm ARRI Macro T4	R	1250.00

35 mm HIGH SPEED

18mm Zeiss T1.3	R	550.00
25mm Zeiss T1.3	R	550.00
35mm Zeiss T1.3	R	550.00
50mm Zeiss T1.3	R	550.00
65mm Zeiss T1.3	R	735.00
85mm Zeiss T1.3	R	550.00

35 mm WIDE ANGLE

* 8mm Century T2.8 Nikkor	R	2,050.00
10mm Zeiss T2.1	R	1,800.00
12mm Zeiss T2.1	R	800.00
14mm Zeiss T2.1	R	1,800.00

35 mm TELEPHOTO

200mm Canon	R	1,000.00
300mm Canon T2.8	R	900.00
400mm Canon T2.8	R	995.00
600mm Canon T4.5	R	1,050.00

35 mm ZOOM

17-102mm Angenieux T2.8	R	2,200.00
18-100mm Cooke Varotal T3	R	1,900.00
25-250mm Cooke Cinetal T3.7	R	2,250.00
25-250mm Angenieux HR T3.5	R	2,200.00
150-600mm Century S2000 T6.7	R	3,250.00
17-35mm Century S2000 T3	R	1,860.00

35 mm SWING & TILT

* ARRI Swing/Tilt Set [24, 45, 90,110]	R	4,635.00
18mm Arri Swing & Tilt T3.8	R	1,200.00
20mm Arri Swing & Tilt T4	R	1,200.00
28mm Arri Swing & Tilt T4	R	1,200.00
35mm Arri Swing & Tilt T4	R	1,200.00
60mm Arri Swing & Tilt T3.5	R	1,200.00
80mm Arri Swing & Tilt T1.9	R	1,200.00
150mm Arri Swing & Tilt T2.8	R	1,200.00

24mm Century Swing&Tilt T4	R 1,200.00
45mm Century Swing&Tilt T2.8	R 1,200.00
90mm Century Swing&Tilt T2.8	R 1,200.00
35 mm VARIABLE PRIMES	
ARRI Vari Prime 16-30mm T2.2	R 2,150.00
ARRI Vari Prime 29-60mm T2.2	R 2,150.00
ARRI Vari Prime 55-105mm T2.2	R 2,150.00

SPECIAL LENSES

* T-Rex Lens System T7.1	R11,500.00
* Century 2000 Snorkel	R 1,500.00
* Low Angle Prism	R 1,500.00

*** Normal discounts do not apply**

ARRI SR 3 16 mm Camera High-Speed Kit R 3,200.00

Speed Range 10 - 150 fps

400 ft Magazines

Changing Bag

24 v On-board Batteries & Cables

On-board Battery Adaptor

Pistol Grip

Sync Sound

Arriglow

Arri Sliding Base Support System (19mm)

Time Code

45, 90, 135, 144, 172.8, 180 °Shutter

ARRI SR3 16 mm Camera Normal-Speed Kit R 3,200.00

Speed Range 5 - 75 fps

400 ft Magazines

Changing Bag

24 v On-board Batteries & Cables

On-board Battery Adaptor

Pistol Grip

Sync Sound

Arriglow

Arri Sliding Base Support System (19mm)

Time Code

45, 90, 135, 144, 172.8, 180 °Shutter

ARRI 16 SR III VTO

ARRI SR IVS VTO

R 2,250.00

Denz 2000 VTO

R 1,600.00

*** Normal discounts do not apply**

ARRI 16 SR III Evolution Accessories

120m/400ft 16SR II Magazine	R190.00
ARRI SR II Extension View finder	R173.00
Wet Weather Cover for ARRI SR II	R125.00
Hand Held Support [Universal]	R450.00
Remote On/Off Cable for 24V Cameras	R 65.00
DC/DC Converter 24v/12v with On/Off Switch	R100.00
Follow Focus 19mm System	R475.00
Barney for SRIII	R 80.00
TV Barline Adjuster	R150.00
Varispeed Control	R173.00

ARRI 16 SR III Accessories

120m/400ft Time Code Magazine + L.P	R450.00
120m/400ft H/S Time Code Mag + L.P	R450.00
ARRI SR III Extension View finder	R400.00
* Wet Weather Cover for ARRI SR	R125.00
Barney for SRIII	R 80.00
* Heated Eyepiece for ARRI SRIII	R210.00
Remote On/Off Cable for 24V Cameras	R 75.00
24v/12v DC Converter with On/Off Switch	R100.00
ZV Splitter SRIII	R 50.00
RCU (Remote Control Unit)	R550.00
RCU 10 metre cable	R 75.00
ARRI Worklight	R 60.00
VSU 4 Variable Speed Unit	R365.00
Hand Held Support [Universal]	R450.00
* ESU (External Synch Unit)	R535.00

BATTERIES

12 v, 16 v, 24 v, 28 v, 30 v	R 60.00
------------------------------	---------

CHARGERS

12 v, 16 v, 24 v, 28 v, 30 v	R 72.00
------------------------------	---------

BATTERY BELTS

12/5AH Battery Belt with Charger	R120.00
24/5AH Battery Belt with Charger	R120.00

CLIP ON MATTEBOXES

LMB-3 4x4 Clip On Mattebox	R250.00
LMB-5 4x5.6 Clip On Mattebox	R350.00
LMB-4 6x6 Clip On Mattebox	R585.00

PRODUCTION MATTEBOXES

MB 16 4x4 Mattebox Kit 19mm	R475.00
MB 18 4x5.6 Mattebox Kit 19mm	R475.00
MB 14 6x6 Mattebox Kit 19mm	R570.00
16 mm HIGH SPEED	
9.5mm Zeiss T1.3 (S16)	R 550.00
12mm Zeiss T1.3 (S16)	R 550.00
16mm Zeiss T1.3 (S16)	R 550.00
25mm Zeiss T1.3 (S16)	R 550.00
50mm Zeiss T1.3 (S16)	R 550.00
16 mm WIDE ANGLE	
* 4mm Optex T2 (S16)	R 750.00
* 5.5mm Optex T2 (S16)	R 750.00
* 6mm Century (S16)	R 680.00
* 8mm Optex T1.8 (S16)	R 550.00
16 mm ZOOM	
* 11.5-138mm Angenieux T2.3 (S16)	R 1,550.00
* 11-165mm Canon (S16)	R 1,650.00
8-64mm Canon (S16) T2.4	R 1,250.00
* 7-81mm Angenieux (S16)	R 1,660.00
* 7-63mm Canon T2.4 (S16)	R 1,250.00
LENS ACCESSORIES	
Tewe	R 65.00
Pentafinder / Director's Viewfinder 16/35	R 315.00
Preston Radio Remote	R1,900.00
* Fox	R 850.00
Microforce 12v 19mm	R 360.00
Microforce 24v 19mm	R 360.00
Microforce Extension 18metres	R 60.00
Microforce Extension 9metres	R 40.00
Oppenheimer Handle Open	R 270.00
138mm Diopters 1/2-2	R 475.00
4.5" Diopters 1/2-4	R 350.00
138mm Splitfield Diopters 1/2-3	R 450.00
4.5" Splitfield Diopters 1/2-2	R 450.00
80mm Splitfield Diopters 1/2-2	R 185.00
80mm Diopters 1/2-3 & Ring	R 250.00
1.4X Extender Canon	R 240.00
2X Extender Canon	R 225.00
Doubler Century PL-PL	R 250.00
1.4X Extender Century	R 240.00
* Aspheron Century S2000	R 275.00
VIDEO RECORDERS AND MONITORS	
Modulus 3000	R 750.00
Transvideo 5"	R 350.00

*** Normal discounts do not apply**

Filters

COLOUR CONVERSION FILTERS		In Set	
4"			
85, LLD, 80A		1	R 70.00
138mm 85			R 80.00
48mm 85			R 30.00
40.5mm 85			R 70.00
4x5.6"			
85, LLD, 80A		1	R 80.00
6"			
85, LLD, 80A		1	R 90.00
COLOUR CORRECTION FILTERS			
4"			
81EF	1	1	R 70.00
Optical Flat	1	1	R 180.00
Haze 1	1	1	R 180.00
4x5.6			
81EF	1	1	R 80.00
Optical Flat	1	1	R 200.00
Haze 1	1	1	R 200.00
6"			
81EF	1	1	R 90.00
Optical Flat	1	1	R 250.00
Haze 1	1	1	R 250.00
COMBINATION FILTERS			
4"			
85ND, 81EF ND		4	R250.00
4x5.6			
85 ND, 81 EF ND		4	R300.00
4"			
85 Pola		1	R 70.00
4x5.6			
85 Pola		1	R 80.00
6"			
85 Pola		1	R 90.00
48mm 85 ND 0.3-0.9		3	R 80.00
40.5mm 85 ND 0.3-0.9		3	R 80.00
138mm 85 Pola		1	R 80.00

* Normal discounts do not apply

WARM HUE FILTERS

In Set

Enhancer

4 " 812	1	R 110.00
4x5.6 812	1	R 120.00
6" 812	1	R 130.00

Sepias

4" Sepias 1-3	3	R 200.00
4x5.6" Sepias 1-3	3	R 220.00
6" Sepias 1-3	3	R 250.00

Warm Soft FX

4x4 Warm Soft FX 1/2-5	6	R 380.00
4x5.6 Warm Soft FX 1/2-5	6	R 400.00
6x6 Warm Soft FX 1/2-5	6	R 450.00

EFFECT FILTERS

4" Double Fogs 1/8-5	6	R 200.00
4x5.6 Double Fogs 1/8-5	6	R 250.00
6" Double Fogs 1/8-5	6	R 300.00

CONTRAST FILTERS

4" Low Contrasts 1/8-5	8	R 430.00
4x5.6 Low Contrasts 1/8-5	8	R 450.00
6" Low Contrasts 1/8-5	8	R 560.00

4" Ultra Contrasts 1/8-5	8	R 430.00
4x5.6 Ultra Contrasts 1/8-5	8	R 450.00
6" Ultra Contrasts 1/8-5	8	R 560.00

SOFT FILTERS

4" Promists 1/8-5	8	R 375.00
4x5.6 Promists 1/8-5	8	R 375.00
6" Promists 1/8-5	8	R 425.00

4" Black Promists 1/8-2	5	R 375.00
4x5.6 Black Promists 1/8-2	5	R 400.00
6" Black Promists 1/8-2	5	R 450.00

4" Classic Softs 1/8-2	5	R 450.00
6" Classic Softs 1/8-2	5	R 500.00

4" Soft FX 1/8-5	6	R 425.00
4x5.6 Soft FX 1/8-5	6	R 450.00
6" Soft FX 1/8-5	6	R 480.00

* Normal discounts do not apply

NEUTRAL FILTERS	In Set	
4" ND 0.3-1.2	4	R 250.00
4x5.6 ND 0.3-1.2	4	R 275.00
6" ND 0.3-1.2	4	R 300.00
48mm ND 0.3-0.9	3	R 200.00
40.5mm ND 0.3-0.9	3	R 200.00

PANCHRO 1&2		
4" ND Centre Spots 0.3-0.9	3	R 975.00
4x5.6 ND Centre Spots 0.3-0.9	3	R 975.00
6" ND Centre Spots 0.3-0.9	3	R 975.00

BLACK & WHITE FILTERS

4"		
Red 23A	1	R 75.00
Yellow 8	1	R 75.00
Orange 16	1	R 75.00
Green 11	1	R 75.00
Yellow 12	1	R 75.00
Dark Yellow 15	1	R 75.00

4x5.6		
Red 23A	1	R 90.00
Yellow 8	1	R 90.00
Orange 16	1	R 90.00
Green 11	1	R 90.00
Yellow 12	1	R 90.00
Dark Yellow 15	1	R 90.00

6"		
Red 23A	1	R 100.00
Yellow 8	1	R 100.00
Orange 16	1	R 100.00
Green 11	1	R 100.00
Yellow 12	1	R 100.00
Dark Yellow 15	1	R 100.00

*** Normal discounts do not apply**

COLOUR EFFECT FILTERS

4x4 Straws 1-3	3	R 200.00
4x5.6 Straws 1-3	3	R 225.00
6x6 Straws 1-3	3	R 250.00
4x4 Tobaccos 1-3	3	R 200.00
4x5.6 Tobaccos 1-3	3	R 225.00
6x6 Tobaccos 1-3	3	R 250.00
4x4 Chocolates 1-3	3	R 200.00
4x5.6 Chocolates 1-3	3	R 225.00
6x6 Chocolates 1-3	3	R 250.00

POLARISER FILTERS

	In Set	
4" Polariser	1	R 70.00
4x5.6 Polariser	1	R 80.00
6" Polariser	1	R 90.00
4" True Polariser	1	R 70.00
4x5.6 True Polariser	1	R 80.00
6" True Polariser	1	R 90.00
4" Ultra Polariser	1	R 80.00
4x5.6 Ultra Polariser	1	R 90.00
6" Ultra Polariser	1	R 100.00
4" Ultra Polariser Circular	1	R 80.00
4x5.6 Ultra Polariser Circular	1	R 90.00
6" Ultra Polariser Circular	1	R 100.00
138mm Polariser	1	R 90.00
105mm Polariser	1	R 90.00
52mm Polariser	1	R 50.00
48mm Polariser	1	R 50.00
40.5mm Polariser	1	R 40.00

*** Normal discounts do not apply**

GRADUATED FILTERS

4x4 ND	Grads Soft 0.3-1.2	4	R 250.00
4x5.6 ND	Grads Soft 0.3-1.2	4	R 275.00
6x6 ND	Grads Soft 0.3-1.2	4	R 300.00
4x4 ND	Grads Hard 0.3-1.2	4	R 250.00
4x5.6 ND	Grads Hard 0.3-1.2	4	R 275.00
6x6 ND	Grads Hard 0.3-1.2	4	R 300.00
4x4	Straw Grads Soft 1-3	3	R 200.00
4x5.6	Straw Grads Soft 1-3	3	R 225.00
6x6	Straw Grads Soft 1-3	3	R 250.00
4x4	Blue Grads Soft 1-3	3	R 250.00
4x5.6	Blue Grads Soft 1-3	3	R 300.00
6x6	Blue Grads Soft 1-3	3	R 350.00
4x4	Blue Grads Hard 1-3	3	R 250.00
4x5.6	Blue Grads Hard 1-3	3	R 300.00
6x6	Blue Grads Hard 1-3	3	R 350.00
4x4	Coral Grads Soft 1/8-5	8	R 480.00
4x5.6	Coral Grads Soft 1/8-5	8	R 520.00
6x6	Coral Grads Soft 1/8-5	8	R 560.00
4x4	Coral Grads Hard 1/8-5	8	R 480.00
4x5.6	Coral Grads Hard 1/8-5	8	R 520.00
6x6	Coral Grads Hard 1/8-5	8	R 560.00
4x4	Tobacco Grads Soft 1-3	3	R 225.00
4x5.6	Tobacco Grads Soft 1-3	3	R 250.00
6x6	Tobacco Grads Soft 1-3	3	R 275.00
4x4	Chocolate Grads Soft 1-3	3	R 225.00
4x5.6	Chocolate Grads Soft 1-3	3	R 250.00
6x6	Chocolate Grads Soft 1-3	3	R 275.00

*** Normal discounts do not apply**

Dollies

Fischer 10	R 3650.00
Super Peewee	R 3500.00
Super Panther	R 3650.00
Skateboard Dolly	R 305.50
Desert Dolly	R 350.00

Dolly Accessories

3 Way Leveller	R 150.00
Panther 4 Way Leveller	R 130.00
100mm Bowl adaptor	R 45.00
2 Way Leveller	R 150.00
Dolly Riser (36")	R 120.00
Mitchel Camera Riser 24"	R 150.00
Mitchel Camera Riser 12" spigot	R 160.00
Mitchel Camera Riser 6"	R 120.00
Paddlemount Single Tube	R 125.00
Paddlemount Twin Tube	R 250.00
Panther Dolly Cover	R 120.00
Panther Long Offset Bowl	R 120.00
Panther Short Offset Bowl	R 120.00
Panther Sliding Ubangi	R 425.00
Panther World Cup Bowl	R 150.00
Peewee 4 Pneumatic Wheels	R 450.00
Peewee 4 Cover	R 120.00
Speed Wheels	R 370.50
Super Soft Wheels	R 390.00

Dolly Tracks

Dolly Track 2.3m	R 120.00
Dolly Half Track 1.2m	R 85.00
Dolly 3 Quarter Track 1.2m	R 85.00
Tight Curve Tracks	R 120.00
Wide Curved Tracks	R 120.00

Heads

Arri Geared Head	R 1200.00
Cartoni Lamda	R 900.00
O'Connor 2575	R 900.00
Ronford F7	R 550.00
Ronford F7 Mk 4	R 560.00
Sachtler 7x7	R 455.00
Sachtler 9x9	R 715.00
Sachtler Dutch Head	R 585.00
Sachtler Studio 65	R 715.00

Sachtler Studio 80	R 715.00
Tango Swing Head	R 676.00
Weaver Steadman 3 Axis Head	R 900.00

*** Normal discounts do not apply**

Head Accessories

Adjustable Wedge Plate	R 70.00
Bazooka Flat Base	R 110.00
Camera Sliding Wedge Plate	R 70.00
Euro Adaptor Plate (Mitchell to Euro)	R 75.00
Euro Adaptor Spiggots	R 45.00
Vibration Isolater	R 350.00

Legs

Shultz Tall + Short Legs (Flat)	R 195.00
Shultz Tall + Short Legs (bowl)	R 195.00
Ronford Tall + Short Legs (flat)	R 195.00
Hi Hat Flat	R 65.00
Low Boy Bowl	R 65.00
Ronford Tall + Short Legs (Bowl)	R 195.00
Set Baby Legs	R 100.00

Cranes and Jib Arms

Giraffe Classic Crane	R3000.00
Crane Tracks 0.9m	R 85.00
Crane Tracks 2.3m	R 124.00
Panther Mini Jib Arm	R 850.00
Stinger Jib Arm	R1800.00

Other Mounts

Bazooka Triangle Base	R 160.00
Bazooka Tube 40cm	R 220.00
Bazooka Tube 30cm	R 220.00
Bukman Rotating Offset	R 165.00
Bungi Mount	R 120.00
Camera Shaker	R 315.00
Cine Saddle Bag	R 120.00
Easy Rig	R 750.00
Ladder Pod 12 – 18 Ft	R 400.00
Ladder Pod 18 – 30 Ft	R 500.00
Ladder Pod Top Plate	R 100.00
Mokit	R 500.00
Pole Cat 6m	R 250.00
Rocker Plate	R 180.00
Set of Bazooka Risers	R 400.00

*** Normal discounts do not apply**

DAYLIGHTCOMPACT FLICKER FREE

18K Silver Bullets Daylight FF	R 3,000.00
12K ARRI Daylight FF	R 2,100.00
6K ARRI Compact FF	R 1,430.00
4K ARRI Comapct FF	R 850.00
2.5K ARRI Compact FF	R 550.00
1.2K ARRI Compact FF	R 400.00
575w ARRI Compact FF	R 300.00
200w ARRI Compact FF	R 280.00

SCRIMSETS X4

Scrimset 18K	R 25.00
Scrimset 12K	R 25.00
Scrimset 10K	R 25.00
Scrimset 6K	R 25.00
Scrimset 5K	R 25.00
Scrimset 4K	R 20.00
Scrimset 2.5K	R 20.00
Scrimset 2K	R 20.00
Scrimset 1.2K	R 20.00
Scrimset 1K	R 15.00
Scrimset 575w	R 15.00
Scrimset 650w	R 12.00
Scrimset 500w	R 12.00
Scrimset 300w	R 12.00
Scrimset 150w	R 12.00

HEAD EXTENSION CABLES (EXTRA)

18K 12K	25 metres	R 120.00
18K 12K	7 metres	R 78.00
6K	15 metres	R 104.00
6K	7 metres	R 65.00
4K 2.5K	7 metres	R 45.50
1.2K 575w	7 metres	R 45.50
200w	5 metres	R 26.00

*** Normal discounts do not apply**

DAYLIGHT PAR FLICKER FREE

12K ARRISUN FF	R 5,550.00
6K ARRISUN FF	R 3,200.00
4K ARRISUN FF	R 1,400.00
2.5K ARRISUN FF	R 1,150.00
1.2K ARRISUN FF	R 630.00
575w ARRISUN FF	R 460.00
400w Jocker/Bug FF	R 617.50
200w ARRISUN FF	R 455.00
200w Jocker/ Bug FF	R 546.00
125w ARRILUX Pocket Par FF	R 487.50
200w/400w Joker soft tube	R 200.00

DAYLIGHT OPEN FACED FF

6K ARRI X FF	R 3,575.00
4K ARRI X FF	R 1,380.00
2.5K ARRI X FF	R 1,190.00
1.2K ARRI X FF	R 700.00
575w ARRI X FF	R 455.00

DAYLIGHT SOFTLIGHT FF

6K Desisti Softlight FF	R 1,105.00
4K Optex Aurasoft FF	R 1,800.00
2.5K Desisti Softlight FF	R 470.00

BALLASTS ELECTRONIC (EXTRA)

18K 12K Electronic Ballast	R 975.00
12K 6K Electronic Ballast	R 715.00
6K Electronic Ballast	R 422.00
4K 2.5K Electronic Ballast	R 175.00
1.2k 575w Electronic Ballast	R 97.00

200w Electronic Ballast	R 71.00
125w Electronic Ballast	R 65.00

*** Normal discounts do not apply**

INCANDESCENT FRESNEL

20K Desisti Fresnel	R 1,500.00
10K Bambino Fresnel	R 270.00
5K Bambino Fresnel	R 110.00
2K Bambino Fresnel	R 70.00
1K Bambino Fresnel	R 60.00
650w Bambino Fresnel	R 50.00
500w Bambino Fresnel	R 45.00
300w Bambino Fresnel	R 45.00
150w Desisti Fresnel	R 45.00

INCANDESCENT OPEN FACED

Pinza 500w	R 40.00
Redhead 800w	R 52.00
Blonde 2000w	R 60.00
Micro Brute 4x 250w	R 104.00
Micro Brute 6x 250w	R 130.00
Micro Brute 8x 250w	R 156.00
Mini Brute 4x 650w	R 175.00
Mini Brute 6x 650w	R 200.00
Mini Brute 8x 650w	R 230.00
Maxi Brute 6x 1000w	R 350.00
Maxi Brute 9x 1000w	R 420.00
3 Pod Dino 3x Segments (4x1000w)	R 570.00
6 Pod Dino 6x Segments (4x1000w)	R1,100.00

INCANDESCENT PAR

1000w Rocket PAR 64	R 50.00
---------------------	---------

INCANDESCENT SOFTLIGHT

ARRI Softlight 4x 1250w	R 104.00
-------------------------	----------

INCANDESCENT DEDOLIGHT

Dedolight Kit 12V (4x 100w)	R 485.00
Dedolight Kit 24V (3x 150w)	R 500.00

XENON

4K Xenotech	R 2,470.00
Lightning Strike 125000w	R 2,850.00

*** Normal discounts do not apply**

KINO FLO

Wall O Lite Daylight or Tungsten (10x 4ft)	R 890.00
Flathead Image 80	R 852.00
Kino Flo Daylight or Tungsten 4ft (4 bank system)	R 455.00
Kino Flo Daylight or Tungsten 2ft (4 bank system)	R 455.00
Kino Flo Daylight or Tungsten 4ft (Single system)	R 125.00
Kino Flo Daylight or Tungsten 4ft (Double system)	R 221.00
Kino Flo Daylight or Tungsten 2ft (Single system)	R 125.00
Kino Flo Daylight or Tungsten 2ft (Double system)	R 221.00
Kino Flo Daylight or Tungsten 15" (single system)	R 125.00
Micro Flo Kit	R 420.00
Mini Flo	R 255.00

ADDITIONAL TUBES 3200k or 5600k

4ft 5600 tube	R 45.00
4ft 3200 tube	R 45.00
2ft 5600 tube	R 45.00
2ft 3200 tube	R 45.00
15" 5600 tube	R 45.00
15" 3200 tube	R 45.00
Mini Flo 5600 tube	R 45.00
Mini Flo 3200 tube	R 45.00
Micro Flo 5600 tube 16cm	R 45.00
Micro Flo 3200 tube 16cm	R 45.00
Micro Flo 5600 tube 10cm	R 45.00
Micro Flo 3200 tube 10cm	R 45.00
4ft Blacklight Blue tube	R 45.00
2ft Blacklight Blue tube	R 45.00

INCANDESCENT SOFTLIGHT

Rifa Lite 1000w	R 100.00
Rifa Lite 650w	R 95.00

JOKER LIGHTING

Joker Bug Light 200w	R 550.00
Joker Bug Light 400w	R 620.00
Joker Bug Light 800w	R 945.00
Soft Tube 200w	R 200.00
Soft Tube 400w	R 200.00

*** Normal discounts do not apply**

BATTERY LIGHTING

ARRISUN 125w FF Battery Ballast	R 450.00
125w FF Battery Belt	R 130.00
125w FF Battery Belt Charger	R 35.00
ARRISUN 200w FF Battery Ballast	R 450.00
Truck Battery 88Ah	R 84.00
Truck Battery 132Ah	R 169.00
Heavy Duty Charger	R 51.00
12v-220v Inverter 2k	R 350.00

PROFILE SPOTLIGHT

1200w Daylight Followspot	R1,105.00
---------------------------	-----------

SPECIAL PURPOSE LIGHTS & ACCESSORIES

Spacelight 6x 800w	R120.00
150w Stick Up Kit 24V	R110.00
Lighting Chains	R 4.00
Chinese Ball Large	R110.00
Chinese Ball Medium	R 91.00
Chinese Ball Small	R 78.00

CHIMERA

Chimera Daylight Small	R 290.00
Chimera Daylight Medium	R 320.00
Chimera Daylight Large	R 455.00
Chimera Daylight Senior Large	R 480.00

LANTERN CHIMERA

Chimera Lantern Medium	R 214.00
Chimera Lantern for Jocker Bug	R 169.00

LOUVERS CHIMERA

Louvers Small	R 50.00
Louvers Medium	R 50.00
Louvers Large	R 50.00

HONEY COMB CHIMERA

Honey Comb Grid small 60 degrees	R 20.00
Honey Comb Grid medium	R 20.00

SPEED RINGS CHIMERA

All sizes of speedrings	R 110.00
-------------------------	----------

*** Normal discounts do not apply**

8 x 8 OVER HEAD SCRIMS

8 x 8 Frame	R	52.00
8 x 8 Hi Light Plastik	R	70.00
8 x 8 Silk	R	90.00
8x 8 Silk half	R	60.00
8 x 8 Silk quarter	R	60.00
8 x 8 Light Grid Cloth	R	60.00
8 x 8 Griffolyn	R	60.00
8 x 8 Grid Cloth	R	60.00
8 x 8 Unbleached Muslin	R	60.00
8 x 8 White Bounce	R	60.00
8 x 8 Silver	R	65.00
8 x 8 Silver Bounce	R	65.00
8 x 8 Gold	R	65.00
8 x 8 Gold Bounce	R	65.00
8 x 8 Checkerboard Lame silver/gold	R	85.00
8 x 8 Blackout	R	60.00
8 x 8 Chromakey Blue	R	100.00
8 x 8 Chromakey Green	R	100.00
8 x 8 Single Scrim Black	R	60.00
8 x 8 Double Scrim Black	R	60.00
8 x 8 Single Net White	R	60.00
8 x 8 Double Net White	R	60.00

12 x 12 OVER HEAD SCRIMS

12 x 12 Frame	R	78.00
12 x 12 Hi Light Plastik	R	110.00
12 x 12 Hi Plastik	R	75.00
12 x 12 Silk	R	75.00
12 x12 Silk half	R	75.00
12 x 12 Silk quarter	R	75.00
12 x 12 Light Grid Cloth	R	75.00
12 x 12 Grid Cloth	R	75.00
12 x 12 Griffolyn	R	75.00
12 x 12 Unbleached Muslin	R	75.00
12 x 12 White Bounce	R	75.00
12 x 12 Silver	R	185.00
12 x 12 Silver Bounce	R	185.00
12 x 12 Gold	R	185.00
12 x 12 Gold Bounce	R	185.00
12 x 12 Checkerboard Lame silver/gold	R	185.00
12 x 12 Blackout	R	75.00
12 x 12 Chromakey Blue	R	100.00
12 x 12 Chroma Green	R	100.00
12 x 12 Single Scrim Black	R	75.00
12 x 12 Double Scrim Black	R	75.00

12 x 12 Single Net White	R 75.00
12 x 12 Double Net White	R 75.00

*** Normal discounts do not apply**

20 x 20 OVER HEAD SCRIMS

20 x 20 Frame	R 130.00
20 x 20 Hi Light soft plastic	R 120.00
20 x 20 Silk	R 97.00
20 x 20 Silk half	R 97.00
20 x 20 Silk quarter	R 97.00
20 x 20 Light Grid Cloth	R 84.00
20 x 20 Grid Cloth	R 84.00
20 x 20 Griffolyn	R 84.00
20 x 20 Unbleached Muslin	R 97.00
20 x 20 White Bounce	R 84.00
20 x 20 Silver	R 300.00
20 x 20 Silver Bounce	R 300.00
20 x 20 Gold	R 300.00
20 x 20 Gold Bounce	R 300.00
20 x 20 Checkerboard Lame silver/gold	R 300.00
20 x 20 Blackout	R 84.00
20 x 20 Chromakey Green	R 120.00
20 x 20 Chromakey Blue	R 120.00
20 x 20 Single Scrim Black	R 97.00
20 x 20 Double Scrim Black	R 97.00
20 x 20 Single Net White	R 97.00
20 x 20 Double Net White	R 97.00

*** Normal discounts do not apply**

WIND UP STANDS

Easy Lift 4 stage	Max Height 6.0 metres	R 300.00
Easy Lift 2 stage	Max Height 3.2 metres	R 200.00
Baby Easy Lift 1 stage	Max Height 1.65 metres	R 200.00
Kobold wind up stand		R 71.00
Easy Lift 3 stage	Max Height 6.0 metres	R 250.00
Safety Rope with Carabiner for Easy Lift		R 4.00

STANDS

Double Riser Steel	Max Height 3.2 Metres	R 29.00
Triple Riser Combo Stand		R 29.00
HI HI Roller		R 29.00
Triple Riser Aluminium	Max Height 3.3 Metres	R 29.00
Lowboy Stand Aluminium	Max Height 1.8 metres	R 29.00
Lowboy Stand	Max Height 1.8 metres	R 29.00
Lowboy Tripple folder base with wheels		R 29.00
C Stand 20	Max Height 1.4 metres	R 25.00
C Stand 40	Max Height 3.2 metres	R 30.00
C Stand 40 Stepped Leg	Max Height 3.2 metres	R 30.00
Turtle Stand		R 10.00
Lightweight Stand	Max Height 2.3 metres	R 13.00
Mighty baby with 16mm pin		R 13.00

STAND ACCESSORIES

Wallbreaker	R220.00
Honka Bonka Set of Three	R 15.00
Stand Riser	R 8.00

BASE PLATES

Base Plate 28/16mm	R 8.00
Base Plate 28/16mm Flap Bar	R 8.00
Base Plate 16mm	R 8.00

POLECATS

Autopole 0.5 (Spanning Between 0.5-1.0 metres)	R 17.00
Autopole 1.0 (Spanning Between 1.0-1.7 metres)	R 19.00
Autopole 1.5 (Spanning Between 1.5-2.7 metres)	R 20.00
Autopole 2.1 (Spanning Between 2.1-3.7 metres)	R 21.00

SPIGGOTS

Spiggot 16mm	R 4.00
Spiggot 16mm Long	R 6.00
Adapter Spiggot 16/28mm	R 8.00
Adapter Spiggot Sleeve 28/16mm	R 8.00

*** Normal discounts do not apply**

GRIPS

Offset Arm 16mm	R 9.00
Hinged 16mm Spiggot to 16mm Spiggot	R 13.00
Ball & Socket 16mm Spiggot to 16mm Spiggot	R 13.00
Double Lollipop 2 1/2 inch	R 10.00
Lollipop 2 1/2 inch	R 10.00
Lollipop 4 1/2 inch	R 12.00
Magic Arm with Lever Lock	R 10.00
Magic Finger 16mm Sleeve to 16mm Spiggot	R 10.00
Offset Arm 28mm	R 10.00
Baby T-Bar 3x 16mm Sleeve	R 10.00
T-Bar 3x 28mm Sleeve	R 10.00
Big Ben with 28mm Spiggot	R 10.00
Double Big Ben with 28mm Spiggot	R 20.00
Counter Balance Arm Small 16mm Spiggot	R 11.00
Charlie Bars	R 13.00
Counter Balance Arm Large 28mm Spiggot	R 20.00
Counter Balance 1.3 kgs 13-30mm Clamp On	R 7.00
Tree Grip with 16mm Spiggot	R 7.00
Junior Swivel Drop Down 28mm Sleeve	R 13.00
Putty Knife	R 6.00
Scissor Clamp with 16mm Spiggot	R 6.00
Square Bar Clamp with 16mm Spiggot	R 6.00
Swivel 28mm Sleeve to 28mm Spiggot	R 10.00
Truss Holders with 28mm Pin	R 13.00
Truss Holders with 28mm Pin double	R 15.00
Swivel Coupler	R 10.00
Coupler single	R 10.00
Fixed double coupler	R 10.00

CLAMPS

Spring Grip 16mm Spiggot	R 9.00
Large Gaffer Grip with screw Lock	R 9.00
Maffer Clamp	R 9.00

SPECIAL CLAMPS

Mini Claw Grip 28 sleeve	R 8.00
Fast Claw Grip 28mm sleeve	R 12.00
Claw Grip with Hinged 28mm sleeve	R 10.00
Pipe Clamp with 28mm Sleeve	R 12.00
Carpenters Clamp	R 15.00
Carpenters Clamp with 28mm Sleeve	R 15.00
Cardellini Pipe Clamp	R 16.00
G Clamp	R 12.00
G Clamp with 16mm Sleeve	R 12.00

G Clamp with 28mm Sleeve	R 12.00
G Clamp with 28mm Hinged Sleeve	R 12.00

*** Normal discounts do not apply**

FRAMES

Aluminium Frame	60x60cm	R 20.00
Aluminium Frame	80x80cm	R 20.00
Aluminium Frame	100x100cm	R 20.00
Aluminium Frame	120x120cm	R 24.00
Aluminium Frame	200x120cm	R 26.00
Wooden Frame	25x25cm	R 14.00
Wooden Frame	60x60cm	R 14.00
Wooden Frame	80x80cm	R 14.00
Wooden Frame	100x100cm	R 14.00
Wooden Frame	120x120cm	R 14.00
Wooden Frame	125x125cm	R 14.00
Wooden Frame	150x150cm	R 14.00
Wooden Frame	200x100cm	R 14.00
Wooden Frame	200x125cm	R 14.00
Filter Frame for 3 Pod Dino		R 52.00
Filter Frame for 6 Pod Dino		R 52.00
Filter Frame for 1/4 Wendy		R 26.00
Filter Frame Holder for 1/4 Wendy/Dino		R 26.00
Filter Frame Holder (Set of Two)		R -

REFLECTORS

Mirror	100x100cm	R 120.00
Mirror	50x50cm	R 110.00
Reflector	120x120cm Hard/Soft Silver	R 80.00
Reflector	120x120cm Hard/Soft Gold	R 80.00
Reflector	120x120cm Single Net White	R 12.00
Reflector	120x120cm Double Net White	R 12.00
Reflector	120x120cm Single Scrim	R 12.00
Reflector	120x120cm Double Scrim	R 12.00
Reflector	100x100cm Hard/Soft Silver	R 80.00
Reflector	100x100cm Hard/Soft Gold	R 80.00
Poly Board Holder		R 8.00

CUCOLORIS

Cucoloris	220x100cm	R 15.00
Cucoloris	150x150cm	R 20.00
Cucoloris	120x120cm	R 20.00
Cucoloris	105x105cm	R 10.00
Cucoloris	90x60cm	R 10.00

TROLLIES

Lighting Rack and Roll Trolley	R 95.00
Grips Cart	R 95.00

Camera Trolleys

R 95.00

*** Normal discounts do not apply**

FLAGS

French Flag with Holder		R 10.00
Flag 1	25x100cm	R 7.00
Flag 2	30x45cm	R 7.00
Flag 3	45x60cm	R 7.00
Flag 4	45x120cm	R 7.00
Flag 5	60x75cm	R 7.00
Flag 6	60x90cm	R 7.00
Flag 7	60x180cm	R 7.00
Flag 8	75x90cm	R 7.00
Flag 9	90x90cm	R 13.00
Flag 10	120x120cm	R 13.00
Flag 11	60x180cm with Floppy	R 13.00
Flag 12	120x120cm with Floppy	R 13.00
Set of Flags		R120.00

YASHMACS

Set 25x30cm	Silk, Single, Double, Triple	R 20.00
Set 30x45cm	Silk, Single, Double, Triple	R 20.00
Set 45x60cm	Silk, Single, Double, Triple	R 20.00
Set 60x75cm	Silk, Single, Double, Triple	R 20.00
Set 60x90cm	Silk, Single, Double, Triple	R 26.00
Set 75x90cm	Silk, Single, Double, Triple	R 26.00
Set 120x120cm	Silk, Single, Double, Triple	R 26.00
Fingers & Dots		R 52.00
Camouflage Net		R220.00

ACCESSORIES

Sandbag		R 7.00
Safety Cable with Carabiner		R 13.00
Safety Strap with Carabiner		R 13.00
Velcro 400mm		R 4.00
Tennis Balls		R 3.00
Snoot 150w ARRI		R 5.00
Snoot 300w ARRI		R 5.00
Snoot 650w ARRI		R 5.00
Snoot 1KW ARRI		R 5.00
Snoot 2KW ARRI		R 9.00

WIND MACHINES

Wind Machine Small Variable	R214.00
Wind Machine 2Kw Variable	R120.00
Wind Machine 2.5 Metres Variable	R845.00

LAMP COVERS

Lamp Cover	R 26.00
------------	---------

*** Normal discounts do not apply**

DISTRIBUTION BOXES

400A 3Phase (studio) Box	R 286.00
400A 3Phase (primary)Box	R 149.00
250A 3Phase(secondary)Box	R 143.00
140A Single Phase Red Box	R 110.00
140A Single Phase White Box	R 110.00
140A Single Phase Blue Box	R 110.00
Power Lock 63A Red Sockets	R 58.00
Power Lock 63A White Sockets	R 58.00
Power Lock 63A Blue Sockets	R 58.00
32A Single Phase Box	R 58.00
16A single Phase Box	R 58.00
15A single Phase Box	R 58.00

CABLE SINGLE CORE

250A PL cable - 100m	R 200.00
250A PL cable - 20m	R 57.00
250A PL cable - 2m	R 42.00
250A PL cable Adapters	R 42.00
140A Red PL Cable -25m	R 50.00
140A White PL Cable -25m	R 50.00
140A Blue PL Cable -25m	R 50.00
140A Red PL Cable -2m	R 36.00
140A White PL Cable -2m	R 36.00
140A Blue PL Cable -2m	R 36.00
140A PL 1(Tails)	R 32.00

CABLE THREE CORE

63A Extension - 25m	R 42.00
63A Extension - 5m	R 26.00
63A Extension - 2m	R 20.00
63A 2(Tails)	R 20.00
32A Extension - 25m	R 25.00
32A Extension - 5m	R 15.00
32A Extension 3or4 (Tails)	R 14.00
16A Extension - 25m	R 20.00
16A Extension - 5m	R 14.00
15A Extension Cables	R 12.00
16A single Phase Box	R 58.00
15A single Phase Box	R 58.00

*** Normal discounts do not apply**

JUMPER SOCKETS

32A-63A Jumper	R 20.00
63A-32A Jumper	R 13.00
32A-16A Jumper	R 13.00
16A-32A Jumper	R 13.00
170A PL-Marechal Jumper	R110.00
170A Marechal-PL Jumper	R110.00
Cable ramps per set	R150.00

DIMMERS

12way 2k dimmer	R450.00
Dimmer 10K	R300.00
Dimmer 5K	R150.00
Dimmer 2K	R 32.00
500w Dimmer	R 25.00

INVERTERS

Inverters 12/220v 1000w	R 58.50
Inverters 12/220v 750w	R 58.50

GENERATORS

Generator 150Kva - Truck included	R2,800.00
Generator 150Kva 4X4 Samil 50	R3,000.00
Generator 40KW Single Phase N/A	R1,885.00
Generator 3KW Honda Semi-Blimped	R 450.00

* Normal discounts do not apply

Appendices

Camera Speed / Time Tables

Time taken for a roll of film to pass through a 35mm camera or projector : min : sec

Camera Speed		6 fps	8 fps	12 fps	16 fps	24 fps	25 fps	32 fps
Feet	Metres	Min : Sec	Min : Sec	Min : Sec	Min : Sec	Min : Sec	Min : Sec	Min : Sec
50	15	02 : 13	01 : 40	01 : 07	00 : 50	00 : 33	00 : 32	00 : 25
100	30	04 : 27	03 : 20	02 : 13	01 : 40	01 : 07	01 : 04	00 : 50
200	61	08 : 53	06 : 40	04 : 27	03 : 20	02 : 13	02 : 08	01 : 40
300	91	13 : 20	10 : 90	06 : 40	05 : 00	03 : 20	03 : 12	02 : 30
400	122	17 : 47	13 : 20	08 : 53	06 : 40	04 : 27	04 : 16	03 : 20
500	152	22 : 13	16 : 40	11 : 07	08 : 20	05 : 33	05 : 20	04 : 10
1 000	305	44 : 26	33 : 20	22 : 13	16 : 40	11 : 07	10 : 40	08 : 20

Camera Speed		48 fps	64 fps	96 fps	128 fps	250 fps	360 fps
Feet	Metres	Min : Sec	Min : Sec	Min : Sec	Min : Sec	Min : Sec	Min : Sec
50	15	00 : 17	00 : 13	00 : 08	00 : 06	00 : 03	00 : 02
100	30	00 : 33	00 : 27	00 : 17	00 : 12	00 : 06	00 : 04
200	61	01 : 07	00 : 50	00 : 33	00 : 25	00 : 13	00 : 09
300	91	01 : 40	01 : 15	00 : 50	00 : 38	00 : 19	00 : 13
400	122	02 : 13	01 : 40	01 : 07	00 : 50	00 : 26	00 : 18
500	152	02 : 47	02 : 05	01 : 23	01 : 02	00 : 32	00 : 22
1 000	305	05 : 33	04 : 10	02 : 47	02 : 05	01 : 04	00 : 44

Camera Speed / Time Tables

Time taken for a roll of film to pass through a 16mm camera or projector : min : sec

Camera Speed		6 fps	8 fps	12 fps	16 fps	24 fps	25 fps	32 fps
Feet	Metres	Min : Sec	Min : Sec	Min : Sec	Min : Sec	Min : Sec	Min : Sec	Min : Sec
50	15	05 : 33	04 : 10	02 : 47	02 : 05	01 : 23	01 : 20	01 : 02
100	30	11 : 07	08 : 20	05 : 33	04 : 10	02 : 47	02 : 40	02 : 05
200	61	22 : 13	16 : 40	11 : 07	08 : 20	05 : 33	05 : 20	04 : 10
300	91	33 : 20	25 : 00	16 : 40	12 : 30	08 : 20	08 : 00	06 : 15
400	122	44 : 27	03 : 20	22 : 13	16 : 40	11 : 07	10 : 04	08 : 20
500	152	55 : 33	41 : 40	27 : 47	20 : 50	13 : 53	13 : 20	10 : 25
1 000	305	111 : 07	83 : 20	55 : 33	41 : 40	27 : 47	26 : 40	20 : 50
1 200	366	133 : 20	100 : 00	66 : 40	50 : 00	33 : 20	32 : 00	25 : 00

Camera Speed		48 fps	64 fps	96 fps	128 fps	250 fps	360 fps
Feet	Metres	Min : Sec	Min : Sec	Min : Sec	Min : Sec	Min : Sec	Min : Sec
50	15	00 : 42	00 : 31	00 : 21	00 : 16	00 : 08	00 : 04
100	30	01 : 23	01 : 02	01 : 41	00 : 31	00 : 158	00 : 08
200	61	02 : 47	02 : 05	01 : 23	01 : 02	00 : 32	00 : 16
300	91	04 : 10	03 : 07	02 : 05	01 : 34	00 : 48	00 : 24
400	122	05 : 33	04 : 10	02 : 47	02 : 05	01 : 04	00 : 32
500	152	06 : 56	05 : 13	03 : 28	02 : 36	01 : 20	00 : 40
1 000	305	13 : 53	10 : 26	06 : 56	05 : 12	02 : 40	01 : 20
1 200	366	16 : 40	12 : 30	08 : 20	06 : 15	03 : 12	01 : 36

SHUTTER ANGLE / EXPOSURE TABLES

Exposure Times at Various Shutter Angles (24fps)

Angle (Degrees)	Exposure at 24fps (Nearest whole Number)	Angle (Degrees)	Exposure at 24fps (Nearest whole Number)
180	1/48 (1/50at25fps)	80	1/108
175	1/49	70	1/123
172.8	1/50	60	1/144
170	1/51	50	1/173
160	1/54	40	1/216
150	1/58	30	1/288
144	1/60	20	1/432
140	1/62	10	1/844
130	1/66	5	1/1728
90	1/96		

Exposure Control by Shutter Adjustment

Exposure	180° Camera	165° Camera
Full exposure	180°	165°
Less 1/3 stops	140°	130°
Less 2/3 stops	110°	100°
Less 1 stop	90°	80°
Less 1 1/3 stops	70°	65°
Less 1 2/3 stops	55°	50°
Less 2 stops	45°	40°
Less 2 1/3 stops	35°	30°
Less 2 2/3 stops	30°	25°
Less 3 stops	22°	20°
Less 3 1/3 stops	18°	15°
Less 3 2/3 stops	14°	12°
Less 4 stops	11°	10°

Variable Camera Speed Tables

	Feet per Minute								
Camera Speed Frames / sec	8	12	16	24	25	32	48	96	120
35mm film	30	45	60	90	93.75	120	80	360	450
16mm film	12	18	24	36	37.5	48	72	144	180

	Metres per Minute								
Camera Speed Frames / sec	8	12	16	24	25	32	48	96	120
35mm film	9.1	13.7	18.3	27.4	28.6	36.6	54.9	110	137
16mm film	3.7	5.5	7.3	11	11.4	14.6	22	44	55

	Exposure - Second (approximately)								
Camera Speed Frames / sec	8	12	16	24	25	32	48	96	120
180° shutter	1/16	1/24	1/32	1/50	1/50	1/60	1/100	1/200	1/250

	Exposure - Adjustment								
Camera Speed Frames / sec	8	12	16	24	25	32	48	96	120
Stops	-1½	-1	-½	normal		+½	1	2	2 2/3

FILTERS FOR COLOUR FILM

Filter No.	Suggested Uses
80A	Converts daylight film for use with 3200°K lamps.
80B	Converts daylight film for use with 3400°K flood.
80C	For use with clear flash and daylight colour films.
81	Yellowish, warming filter.
81A	Balances daylight films to electric flash. Corrects Type B films for use with 3400°K lamps. Prevents excessive blue.
81B	Warmer results than 81A.
81EF	For any 650°K drop, flash lamps with Ektachrome Type B.
82	For any 100° increase in Kelvin temperature for colour renderings.
82A	With Daylight and Daylight Negative films use in early AM or late PM to reduce the excessive red of the light. When using Type A (3400°K) films under 3200° lamps.
82B	For cooler results.
85	Converts Type A film to daylight.
85B	Converts Type B film to daylight.
85C	Helps prevent over-exposure of blue record layer.
CC30R	For underwater photography, to correct colour. Also, to compensate for distortion of colour when shooting through transparent plastic windows similar to vistadomes provided by railroads for camera fans.
FLB	Eliminates the deep blue-green cast ordinarily resultant from shooting colour films with fluorescent lights.
FLD	FLB Type B Films. FLD Daylight Films.
Neutral Density	For uniform reduction of light with high-speed films for still and movie camera. No change of colour value.
CORAL	Warming filters available in a wide range of densities. Used to adjust Kelvin temperature for different times of day. Also used as a warming filter to enhance skin tones.
Polariser	Eliminates surface reflections, unwanted glare or hot spots from any light source. The only filter that will darken a blue sky and increase colour saturation.

COMBINATION FILTERS

Filter No.	Suggested Uses
81EF + ND.3	Reduces excessive blue in daylight. Can be used "Day for Night" in low light situations.
81EF + ND.6	Reduces excessive blue in daylight. Can be used "Day for Night" in normal daylight situations.
81EF + ND.9	Reduces excessive blue in daylight. Can be used "Day for Night" in brighter daylight or with faster film.
85N3	85 combined with ND 0.3. Converts Type A film to Daylight. Permits use of larger lens apertures.
85N6	85 combined with ND 0.6. Converts Type A film to Daylight. Permits use of larger lens apertures.
85N9	85 combined with ND 0.9. Converts Type A film to Daylight. Permits use of larger lens apertures.
85N1.0	85 combined with ND 1.0. Converts Type A film to Daylight. Permits use of larger lens apertures.
85POL	85 combined with Polariser. Converts Type A film to Daylight with all advantages for Polariser.
85BN3	85B combined with ND 0.3. Converts Type B film to Daylight. Permits use of larger lens apertures.
85BN6	85B combined with ND 0.6. Converts Type B film to Daylight. Permits use of larger lens apertures.
85BN9	85B combined with ND 0.9. Converts Type B film to Daylight. Permits use of larger lens apertures.
85BN1.0	85B combined with ND 1.0. Converts Type B film to Daylight. Permits use of larger lens apertures.
85BPOL	85B combined with Polariser. Converts Type B film to Daylight with all advantages of Polariser.

Filter Sizes

Circular Diameter		
Series 5	1 2/16 in	30mm
Series 6	1 5/8 in	42mm
Series 7	2 in	51mm
Series 8	2 ½ in	64mm
Series 8	2 15/16 in	75mm
Series 9	3 ¼ in	82mm
Series 10	4 5/8 in	118mm
	4 ½ in	115mm
	5 ½ in	138mm
	6 in	152mm

Square / Rectangular	
2 x 2 in.	50 x 50mm
3 x 3 in.	76 x 76mm
4 x 4 in.	102 x 102mm
4 x 5.650 in.	102 x 143mm
5 x 6 in.	127 x 152mm
6.6 x 6.6 in.	167 x 167mm

Exposure Factor Table

Factor	1.5	2	3	4	6	8	12	16	24	32	64	128	256
Increase	½	1	1½	2	2½	3	3½	4	4½	5	6	7	8

Neutral Density Filters

	Percentage	Filter	Exposure Increase
ND 0.1	80	1 ¼	1/3
ND 0.2	63	1 ½	2/3
ND 0.3	50	2	1
ND 0.4	40	2 ½	1 1/3
ND 0.5	32	3	1 2/3
ND 0.6	25	4	2
ND 0.7	20	5	2 1/3
ND 0.8	16	6	2 2/3
ND 0.9	13	8	3
ND 10	10	3 1/3	
ND 20	1	100	6 2/3
ND 30	0.1	1,000	10 1/3
ND 40	0.01	10,000	13

Combined Colour Correction and Neutral Density Filter

	Percentage	Filter	Exposure Increase
85N3 85BN3 etc.	32	3	1 2/3
85N6 85BN6 etc.	16	2 2/3	
85N9 85BN9 etc.	9	11	3 2/3

IMAGE CONTROL FILTERS

Black Dot Texture Screens
A form of low contrast filter with a heavily marked screen.
Diffusers
Have a slightly uneven surface which causes light to be bent (refracted) in a random manner. A single point of light which would normally be focused onto a single plane will also be focused onto planes in front of and behind the focal plane if passed through a diffusing filter, and in consequence will appear to have a uniform halation. Half diffusers are available to control diffusion on one side of the screen only. Centre spot diffusers are clear in the centre with heavy diffusion all around.
Nets
Black nets with square corners diffract light like star filters but having thicker lines than stars also hold highlights back. Affect point source of light in the same manner as star filters. Round cornered nets have slighter diffusing effect and do not affect highlights. Have slight polarising effect. White and coloured nets diffract highlights into the shadows giving a desaturating of colour biasing effect.
Fogs
Fog and half fog filters have finely ground or etched surfaces which cause the highlights or the dominant colour to spread into the shadows and veil the image. The more the highlights or the brighter a particular colour the greater the effect. Double fog filters are a combination of fog and low contrast.
Low Contrast
Surface is dotted with myriad's of fine particles of grit which hold back more of the highlights than the shadows increasing the black level in a scene. They do not affect focus as do the various diffusing filters.
Graduated
Filters which are half neutral density (or coloured) and half clear with a soft transition between the two. Samcine filters are graduated fog filters which give an illusion of distance.
Blenders or Attenuators
Overall neutral density (or coloured) wedges across the entire length of the filter.
Pola screens
Polarises light, eliminating reflections on most non-metallic surfaces and darkening blue skies in certain directions. Optimum effect angles are 30° off glass, 37° off water and at a perpendicular of 90° to the sun.
Vari-burst
A diffraction grating type star filter.
Vari-colour
Polarised colour effect filters which, when used in combination with a regular polariser in a rotating mount, may be made to give either of two colours with various shades in between or infinitely variable shades of a single colour.

Projector (Ground Glass Aperture Dimensions)

	70mm	
	inches	mm
Width	1.913	38.59
Height	0.870	22.10
	35mm Full Frame	
	inches	mm
Width	0.931	23.66
Height	0.700	17.78
	35mm Academy	
	inches	mm
Width	0.831	21.11
Height	0.602	15.29
	35mm 1.75:1	
	inches	mm
Width	0.830	21.11
Height	0.472	11.99
	35mm TV Transmitted area	
	inches	mm
Width	0,792	20.12
Height	0.594	15.09
	35mm TV Safe Title	
	inches	mm
Width	0.630	16.10
Height	0.475	13.08
	16mm Standard	
	inches	mm
Width	0.380	9.65
Height	0.286	7.26
	16mm Safe Action	
	inches	mm
Width	0.331	8.4
Height	0.248	6.31
	16mm Type "W" Super 16	
	inches	mm
Width	1.913	38.59

	70mm print from 35mm negative	
	inches	mm
Width	0.753	19.13
Height	0.668	16.97
	35mm Anamorphic	
	inches	mm
Width	0.838	21.29
Height	0.717	18.21
	35mm 1.66:1	
	inches	mm
Width	0.830	21.11
Height	0.197	12.61
	35mm 1.85:1	
	inches	mm
Width	0.830	21.11
Height	0.446	11.33
	35mm TV safe action	
	inches	mm
Width	0.713	18.11
Height	0.535	13.58
	Techniscope	
	inches	mm
Width	0.868	22.05
Height	0.350	8.89
	16mm TV Transmitted	
	inches	mm
Width	0.368	9.35
Height	0.276	7.01
	16mm TV Safe Title	
	inches	mm
Width	0.293	7.48
Height	0.221	6.07

Height	0.870	22.10
--------	-------	-------

Film Warm-Up Times After Cold Storage

Temperature difference		Outside Relative Humidity	Single Roll		Carton
°C	°F	Percent	16mm	35mm	10X35mm
14	25	70	½	1½	12
14	25	90	1	3	28
55	100	70	1	3	30
55	100	90	1½	5	46

Weight of Film Cans (approx)

35mm		16mm		
400ft 2lb 3oz 120m	1kg	100ft	¾ oz 30m	200 grams
1000ft 5lb 8oz 300m	2,5kg	400ft	1lb 1½oz 120m	500 grams

Film Storage Temperatures

Colour Negative	Up to 6 Months		Longer than 6 Months	
	10°F	50°F	0°F	32°F
Tape round film cans should not be removed until film is actually required for use.				

EXPOSURE CONVERSION TABLES

Light

1 Foot Candle = 10.764 Lux			1 Lux = 0.0929 Foot Candle					
Foot	=	Lux	Foot	=	Lux	Foot	=	Lux
1	=	10.7	21	=	226	150	=	1714
2	=	21.5	22	=	237	200	=	2150
3	=	32.3	23	=	248	250	=	2700
4	=	43	24	=	258	300	=	3200
5	=	54	25	=	269	400	=	4300
6	=	65	26	=	280	500	=	5400
7	=	75	27	=	291	600	=	6450
8	=	86	28	=	301	700	=	7500
9	=	97	29	=	312	800	=	8600
10	=	107	30	=	323	900	=	9650
11	=	118	35	=	377	1000	=	10760
12	=	129	40	=	430	1200	=	12900
13	=	140	45	=	405	1400	=	15000
14	=	150	50	=	540	1600	=	17200
15	=	161	55	=	590	1800	=	18400
16	=	172	60	=	645	2000	=	21500
17	=	183	70	=	750	2500	=	26000
18	=	194	80	=	860	3000	=	32000
19	=	205	90	=	970	4000	=	43000
20	=	215	100	=	1070	5000	=	54000

Film Speed

ASA Exposure Index	=	DIN	ASA Exposure Index	=	DIN	ASA Exposure Index	=	DIN
1,6	=	3	20	=	14	250	=	25
2,0	=	4	25	=	15	320	=	26
2,5	=	5	32	=	16	400	=	27
3	=	6	40	=	17	500	=	28
4	=	7	50	=	18	650	=	29
5	=	8	64	=	19	800	=	30
6	=	9	80	=	20	1000	=	31
8	=	10	100	=	21	1300	=	32
10	=	11	125	=	22	1600	=	33
12	=	12	160	=	23	2000	=	34
16	=	13	200	=	24		=	

Doubling on ASA or Exposure Index (E.I.) number doubles the speed rating, halving the number halves the rating. Adding 3 to a DIN number doubles the rating. Adding 3 to a DIN number doubles the rating.

To compare two DIN rating subtract one from the other and divide the remainder by 3 to discover the number of stops difference.

Incident Light Tables

24-25 fps 1/50 sec exposure Foot Candles										
E.I. ASA	Lens Opening									
	f / 1.0	f / 1.2	f / 1.4	f / 2	f / 2.8	f / 4	f / 5.6	f / 8	f / 11	f / 16
16	40	80	160	320	640	1250	2500	5000	10000	20000
20	30	60	125	250	500	1000	2000	4000	8000	16000
25	25	50	100	200	400	800	1600	3200	6400	12500
32	10	40	80	160	320	640	1250	2500	5000	10000
40	15	30	60	125	250	500	1000	2000	4000	8000
50	12	25	50	100	200	400	800	1600	3200	6400
64	10	20	40	80	160	320	640	1250	2500	5000
80	8	15	30	60	125	250	500	1000	2000	4000
100	6	12	25	50	100	200	400	800	1600	3200
125	5	10	20	40	80	160	320	640	1250	2500
160	4	8	15	30	60	125	250	500	1000	2000
200	3	6	12	25	50	100	200	400	800	1600
250	2.5	5	10	20	40	80	160	320	640	1250
320	2	4	8	15	30	60	125	250	500	1000
400	1.5	3	6	12	25	50	100	200	400	800
500	1	2.5	5	10	20	40	80	160	320	640

THE COLOUR OF LIGHT

Approximate Colour Temperature Values

Mireds = 1 000 000/Kelvin

Decamireds = 100 000/Kelvin

Source: Artificial Light	Kelvins	Mireds
Domestic electric light bulb	2900	345
Photographic incandescent bulb	3200	312
Tungsten Halogen bulb	3200	312
Photoflood	3400	294
3200 bulb with 1/8 blue filter	3400	294
3200 bulb with 1/4 blue filter	3600	278
3200 bulb with 1/2 blue filter	4100	244
3200 bulb with full blue filter	5500	182
1 volt drop in power supply to lamp, Each	-10	
Carbon arc, LCT carbons, Y1 filter	3200	312
Carbon arc, WF carbons, full CTO filter	3200	312
Carbon arc, WF carbons, 1/2 CTO filter	4030	248
Carbon arc, WF carbons, 1/4 CTO filter	4650	215
Carbon arc, WF carbons, WFG filter	5550	182

Source: Daylight	Kelvins	Mireds
Dawn or Dusk	2000	500
One hour after sunrise	3500	286
Early morning and late afternoon sunlight	4500	233
Summer sunlight	5500	182
Sunlight blue-white sky	6500	154
Light summer shade	7000	141
Overcast skylight	7000	141
Average summer shade	8000	125
Hazy sunlight	9000	
Summer sky	(30 000)	33

KELVIN / MIRED TABLES

The following tables may be used by making up the number to be converted by adding the unit at the side of a line to the unit at head of a column. The conversion number is where line and column meet i.e. 2100 Kelvins is 476 mireds.

Kelvin to Mired Conversion Table

Kelvins		100	200	300	400	500	600	700	800	900
2000	500	476	455	435	417	400	385	370	357	345
3000	333	323	312	303	294	286	278	270	263	256
4000	250	244	238	233	227	222	217	213	208	204
5000	200	196	192	189	185	182	179	175	172	169
6000	167	164	161	159	156	154	152	149	147	145
7000	143	140	139	137	135	133	132	130	128	126
8000	125	125	123	122	120	119	118	116	114	112

Mired to Kelvin Conversion Table

Mireds		10	20	30	40	50	60	70	80	90
100	10 000	9090	8333	7692	7143	6667	6250	5882	5556	5263
200	5 000	4762	4546	4347	4167	4000	3846	3703	3571	3448
300	3 333	3226	3125	3030	2941	2857	2778	2703	2631	2564

LIGHTING / POWER TABLES

Amps Drawn by Various Lamps and Loads	240V	220V	120V	110V
	Amps			
375 watt Photoflood	1.6	1.7	3.2	3.4
500 watt Photoflood	2.1	2.3	4.2	4.6
650 watt Tungsten halogen	2.75	3	5.5	6
800 Tungsten halogen	3.33	3.66	6.66	7.33
1000 Tungsten halogen	4.2	4.55	8.33	9.1
1250 watt HMI	5.2	5.7	10.4	11.4
2000 watt Tungsten halogen	8.33	9.1	16.7	18.2
2500 watt HMI	10.4	11.4	21	23
4000 watt HMI	17	18.2	35.4	36.4
5000 watt Tungsten halogen	21	23	42	45
5850 watt 9 x 650 watt	25	27	49	54
10000 watt Tungsten halogen	42	46	84	91
25000 watt Total load	105	114	209	228
50000 watt Total load	209	228	417	455
110000 watt Total load	450	500	920	1000

Effect of Reducing Lamp Supply Voltage				
Bulb Voltage	Supply Voltage	Colour Temperature		Light Output
		Kelvin	Mireds	
120	120	3200	312.5	100%
120	110	3100	322	75%
120	100	3000	333	55%
120	90	2900	345	38%

Fluorescent Light

Wratten CC filters recommended for use with various types of fluorescent tubes.
The following are a guide on which trail and error test may be used.

	Colour Film Types			
	3200K (312 Mireds)		Daylight (182 Mireds)	
	filter	factor	filter	factor
Cool White	50M+60Y	1 1/2 stop	30M	2/3 stop
White	40M+40Y	1 stop	30M+20C	1 stop
Warm White	30M+20Y	1 stop	40M+40C	1 1/2 stop
Daylight	30M+20Y	1 stop	40M+30Y	1 stop
Deluxe warm white	10Y	1/3 stop	30M+60C	1 2/3 stop
Deluxe cool white	10M+30Y	2/3 stop	20M+30C	1 stop

The above recommendations are made by the Eastman Kodak Co.
The filters referred to are Wratten CC and 85 ranges.

FLB and FLD Filters

Tiffen FLB filters are intended for camera use with tungsten type colour film and FLD filters for use with daylight type colour film when filming by fluorescent lights to correct a blue or blue-green cast.

Tests should be made with the particular lights to be used as the effectiveness varies with the different types of fluorescent tube.

Rosco make filters for use on the Fluorescent lamps themselves.

Settings for Flickerfree HMI Operation

To calculate compatible settings

Two light pulses per exposure:

Shutter angle = Camera speed x 360 ÷ Supply frequency

Supply frequency = Camera speed x 360 ÷ Shutter angle

Camera speed = Supply frequency x Shutter angle ÷ 360

Any number of light pulses per exposure:

60 Hz supply

Shutter angle = Camera speed x 30 x Number of light pulses per exposure Camera speed x

Shutter angle ÷ Number of light pulses per exposure

Camera speed = Shutter angle - 30 - Number of light pulses per exposure

Relationship of 24 fps Camera to 60 Hz Supply

If a camera running at precisely 24 fps photographs a subject illuminated by HMI lamps operating off a 60 Hz supply, it will be illuminated by 2½ light pulses per exposure.

Assuming the camera speed to be precisely 24 fps, any variation in the power supply frequency will result in a variation in the picture luminancy similar to that produced by an exposure change of 0.4 stops. The time taken for once cycle of variation will depend upon the extent of the variation viz:

Power Supply	Fluctuation Cycle
60 Hz + 0.0025	200sec
60 Hz + 0.004	100 sec
60 Hz + 0.01	50 sec
60 Hz + 0.02	25 sec
60 Hz + 0.05	10 sec

A variation in camera frequency will also cause a 0.4 stop variation in exposure. Assuming the 60 Hz supply to be precise, the cycle of exposure variation caused by a camera running at 24 ± 0.000003 would be approximately 4½ minutes.

However, if the errors were combined, a 60 Hz \pm 0.0025 power supply light for a camera running at 24 \pm 0.000003 could result in an exposure variation every 116 sec.

HMI Flickerfree Filming Speeds at any Shutter Angle

60Hz Line Frequency-180 Shutter Opening		
120.000	10.000	5.217
60.000	9.231	5.000
40.000	8.571	4.800
30.000	8.000	4.000
24.000	7.500	3.750
20.000	7.058	3.000
17.143	6.666	2.500
15.000	6.315	2.000
13.333	6.000	1.875
12.000	5.714	1.500
10.909	5.454	1.000

Optimum Supply Frequencies at 24 fps for Various Shutter Openings

Shutter Angle		Optimum Supply
144	Optimum setting for 24fps/60 Hz operation	60 Hz
165		52.4 Hz
170		50.8 Hz
172.8	Optimum setting for 24fps/50 Hz operation	50 Hz
175		49.4 Hz
180	Optimum setting for 24fps/50 Hz operation	48 Hz

At 24fps/48 Hz exactly, any shutter angle is possible.

At 24 fps/60Hz/144 shutter, 24fps/48Hz/180 shutter, and 25fps/50Hz/180 shutter the tolerances are comparatively wide compared with other combinations.

Tolerance for CSI and CID lights are considerably greater than for HMI.

Shutter Speed at 24 fps

Shutter Angle	Shutter Openings	Optimum Supply
180 Degrees	1 / 48 second	
172.5 Degrees	1 / 50 second	
144 Degrees	1 / 60 second	3 / 10 of a stop
135 Degrees	1 / 64 second	4 / 10 of a stop
120 Degrees	1 / 72 second	6 / 10 of a stop
105 Degrees	1 / 82 second	8 / 10 of a stop
90 Degrees	1 / 96 second	1 stop
75 Degrees	1 / 115 second	1 2 / 10 stop
60 Degrees	1 / 144 second	1 6 / 10 stop
45 Degrees	1 / 192 second	2 stops
30 Degrees	1 / 288 second	2 6 / 10 stop
15 Degrees	1 / 576 second	3 6 / 10 stop
15 Degrees at 24 fps	1 / 576 second	3 6 / 10 stops
15 Degrees at 48 fps	1 / 1152 second	4 6 / 10 stops
15 Degrees at 96 fps	1 / 2304 second	5 6 / 10 stops
15 Degrees at 120fps	1 / 2800 second	5 3 / 4 stops
45 degrees at 24 fps	1 / 192 second	2 stops
45 degrees at 48 fps	1 / 384 second	3 stops
45 degrees at 96 fps	1 / 768 second	4 stops
45 degrees at 120 fps	1 / 1000 second	4 1 / 4 stops