

# **CCT** Improved Silhouette 77

## **variable beam profile spot 1000 range**



CCT Luminaires are currently in use every moment of the day throughout the world.

There's never a dull moment, at the Bolshoi Moscow, the Lido Paris, the Sydney Opera House, La Scala Barcelona, Orpheum Vancouver and our New National Theatre and many other well known places of entertainment.

CCT lighting emphasis is focused on somebody for 24 hours a day, every day of the year.

Proof enough that the Silhouette is simply years ahead. However, our research and development is continuous and in 1977 we announce the Mk II range of Silhouettes that incorporate all the up to date requirements of the world wide lighting profession.

We honestly believe that this is the most advanced 1K profile spot range available.

With greater centre beam light output  
advanced safety features  
greater flexibility  
improved balancing facilities  
increased operational facilities  
Plus a new range of well designed, well manufactured accessories that reflect the basic philosophy of this our /Mark IIA/ 77 range of Silhouettes.

- 1 Basic lamp housing assembly
- 2 25 lens tube
- 3 30/40 lens tube
- 4 15 lens tube
- 5 10 lens tube



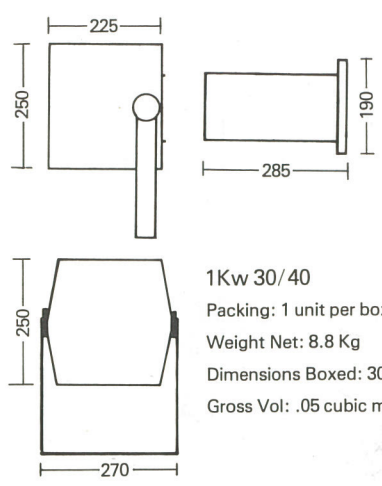
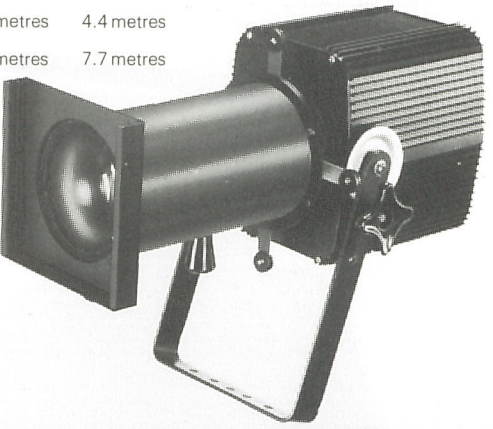
Select the right 1Kw Profile Spot for the job

The Silhouette 30

With the lamp adjusted to produce a 'flat' field of light, this unit has a variable beam angle between 20°-31°, which is ideal for most theatre on stage applications. This same lens tube can be used as a front of house unit with the lamp adjusted to 'peak' beam. The 2 to 1 area of the beam giving variable beam angles between 13°-17°. The shutters or an iris reduced to 2 1/4" diameter, will provide the hard edges for these beam angles or a 'purpose cut' Gobo can be provided.

The light output will be 2/3rds of that achieved by the Silhouette 25 lens tube. In all the above applications, a good soft edge can be achieved by defocusing either within or outside the selected beam angle. An auto-colour change unit is available.

FLAT FIELD					
	Cut Off Angle	Beam Angle	Provides (Centrebeam)	Throw	Diameter Circle
Narrowest	22°	20°	50ft candles (538 Lux)	8.9 metres	3.5 metres
Widest	40°	31°	50ft candles (538 Lux)	7.5 metres	5.4 metres
PEAK BEAM					
Narrowest	22°	13°	50ft candles (538 Lux)	11.2 metres	4.4 metres
Widest	40°	17°	50ft candles (538 Lux)	10.6 metres	7.7 metres



1Kw 30/40  
Packing: 1 unit per box  
Weight Net: 8.8 Kg Gross: 9.8Kg  
Dimensions Boxed: 300 x 310 x 610  
Gross Vol: .05 cubic metres.

The Silhouette 40

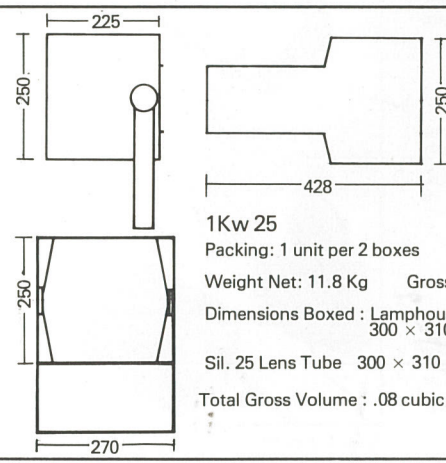
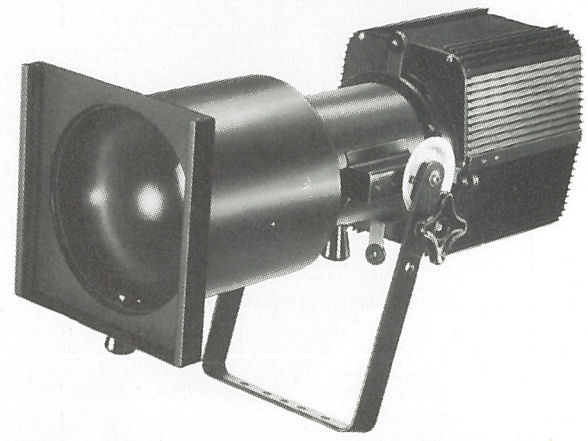
Is a change of lens slide and lens in the same tube as the Silhouette 30. This provides an extra wide beam, variable between 29°-47° (hard edge) and is only recommended for short range T.V. and cyclorama work.

The Silhouette 25

FLAT FIELD					
	Cut Off Angle	Beam Angle	Provides (Centrebeam)	Throw	Diameter Circle
Narrowest	15°	15°	50ft candles (538 Lux)	11.4 metres	2.0 metres
Widest	32°	26°	50ft candles (538 Lux)	8.6 metres	4.9 metres
PEAK BEAM					
Narrowest	15°	14°	50ft candles (538 Lux)	13.5 metres	3.6 metres
Widest	32°	12°	50ft candles (538 Lux)	13.1 metres	7.5 metres



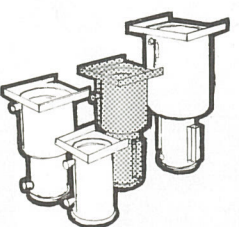
This is the specialists unit for all theatrical uses both on stage and front of house. Having a high light output without reduction in efficiency in the lower beam angles. It is interesting to note that this unit was developed especially for the National Theatre London in collaboration with Theatre Project Consultants Limited. Hard and soft edging and 'peak' as with the Silhouette 30 above.



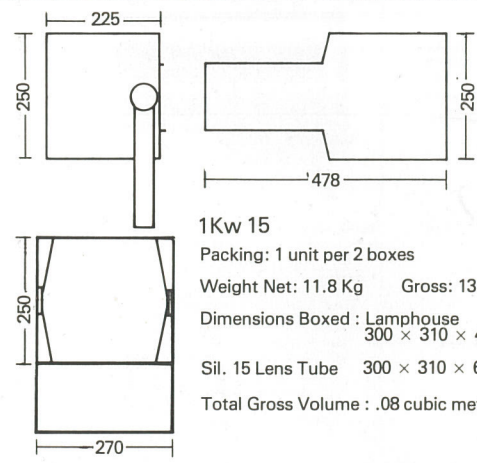
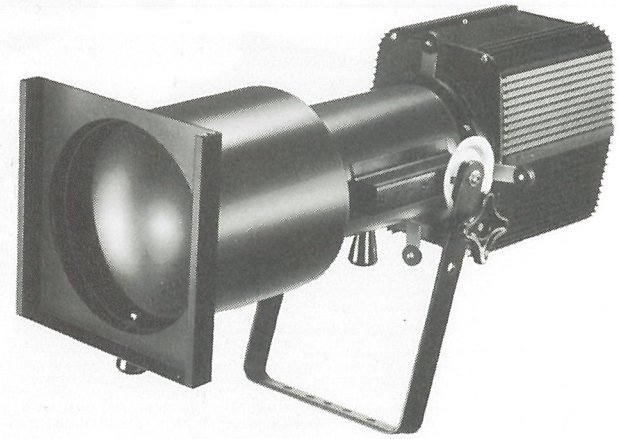
1Kw 25  
Packing: 1 unit per 2 boxes  
Weight Net: 11.8 Kg Gross: 13.0 Kg  
Dimensions Boxed: Lamphouse 300 x 310 x 410  
Sil. 25 Lens Tube 300 x 310 x 610  
Total Gross Volume: .08 cubic metres

The Silhouette 15

FLAT FIELD					
	Cut Off Angle	Beam Angle	Provides (Centrebeam)	Throw	Diameter Circle
Narrowest	16°	9°	50ft candles (538 Lux)	18.3 metres	3.5 metres
Widest	23°	19°	50ft candles (538 Lux)	11.4 metres	4.6 metres
PEAK BEAM					
Narrowest	11°	6°	50ft candles (538 Lux)	21.6 metres	4.2 metres
Widest	23°	9°	50ft candles (538 Lux)	18.8 metres	7.6 metres



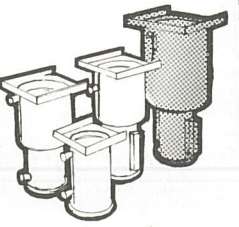
This unit covers the majority of front of house and follow spot work (beam angles 6°-19°) and has the features of the Silhouette 25. In addition, it provides a very useful low cost follow spot when equipped with iris blackout assembly and rear handle. Hand operated colour change and auto-colour change units are available to fit this easily rebalanced luminaire.



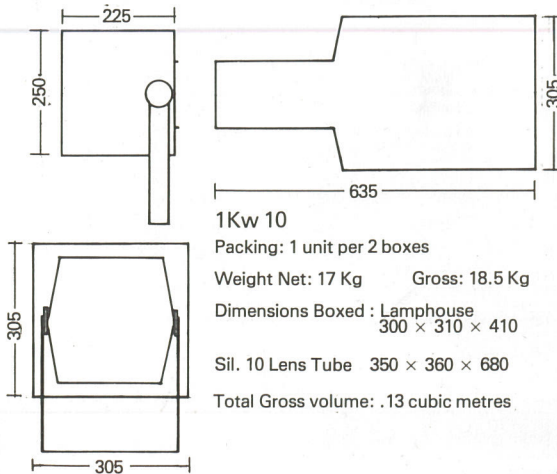
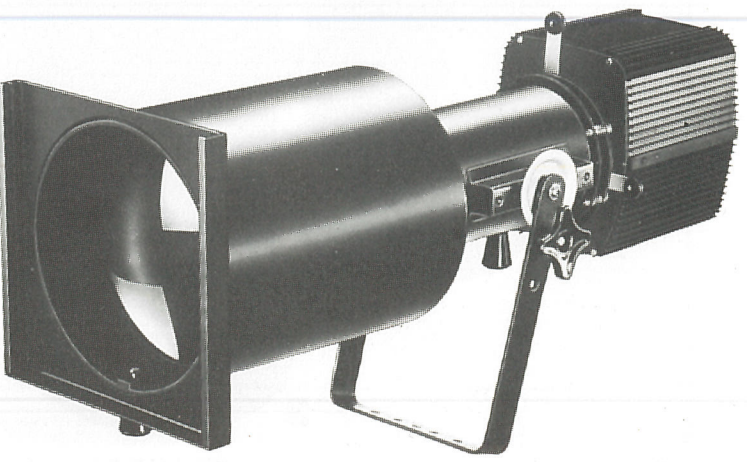
1Kw 15  
Packing: 1 unit per 2 boxes  
Weight Net: 11.8 Kg Gross: 13.0 Kg  
Dimensions Boxed: Lamphouse 300 x 310 x 410  
Sil. 15 Lens Tube 300 x 310 x 610  
Total Gross Volume: .08 cubic metres

The Silhouette 10

FLAT FIELD					
	Cut Off Angle	Beam Angle	Provides (Centrebeam)	Throw	Diameter Circle
Narrowest	9°	9°	50ft candles (538 Lux)	21.6 metres	3.4 metres
Widest	20°	16°	50ft candles (538 Lux)	14.9 metres	5.3 metres
PEAK BEAM					
Narrowest	9°	6°	50ft candles (538 Lux)	24.8 metres	3.9 metres
Widest	20°	9°	50ft candles (538 Lux)	21.1 metres	7.4 metres



The stretched version of the Silhouette 15 specialising in exceptionally long throw work at 6°-16° beam angle, it makes an excellent follow spot. Its size weight ratio provides the inertia for smooth follow spot operation when equipped with iris blackout and rear handle. A six colour hand operated colour change unit is available with this unit, the tight narrow beam makes it ideal for overcoming the long throw problems encountered in opera houses, arenas and concert halls.

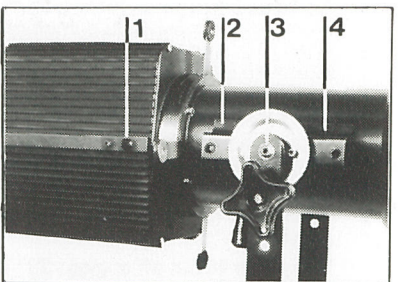


1Kw 10  
Packing: 1 unit per 2 boxes  
Weight Net: 17 Kg Gross: 18.5 Kg  
Dimensions Boxed: Lamphouse 300 x 310 x 410  
Sil. 10 Lens Tube 350 x 360 x 680  
Total Gross volume: .13 cubic metres

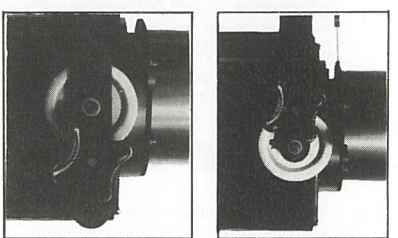
The improvements that put the new Silhouette Range simply years ahead are:

even greater centrebeam light output  
even greater safety  
even greater flexibility

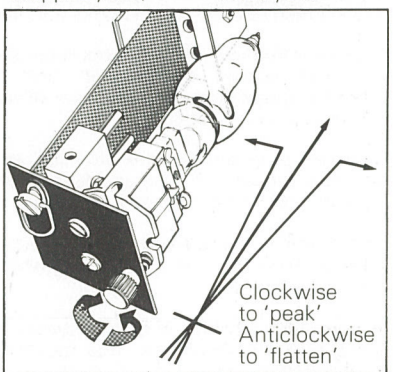
New Balancing System  
Complete flexibility is given by a series of alternative balance fixing points running through lamp house to lens tube whilst any accessory is 'on board' as illustrated 1 - 4



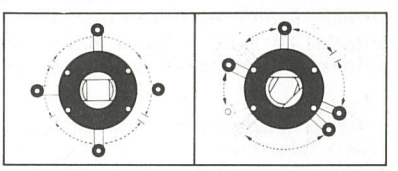
New Height Adjustment Yoke.  
Normal overall height of yoke can be reduced by 10cm (1/3rd) for mounting luminaire up tight to the hanging position, this also provides greater stability when used on a stand.



New 'No Tool' Lamp Adjustment.  
From 'flat' to 'peak' beam at the twist of an insulated thumb screw without burnt fingers. The complete lamp holder is sprung to reduce vibration transmitted to bulb and fully floating for mechanical safety.



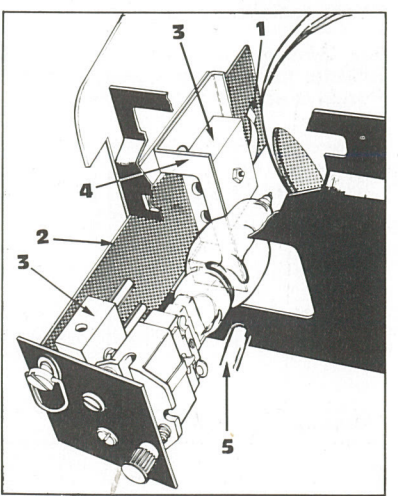
New Shutter Set  
Shutters operate from the top and side. The side shutters having an 80° angle of operation, top and bottom shutters have a 140° angle of operation and can marry up to side shutters when in extreme positions.



New Reflector.  
Improved design reflector gives an ability to peak the centre beam 45% higher in light output than the previous design.

New Finish.  
The luminaires are electro-statically coated with a matt black texture plastic finish which is baked on and has a high resistance to chipping and marking. The luminaire has a velvet look that reduces reflected light considerably allowing the unit to merge into the background.

- Increased Safety Features.
1. Spring scraping earth with positive location which bears onto the...
  2. plated lamp slide for earth continuity even when the lamp slide is partially withdrawn from...
  3. ...the new styled ceramic. Male and female insulation has been increased in size to give even greater electrical protection with the female...
  4. protected against mechanical damage by a metal top hat section. This section is earthed and prevents the lamp slide coming into contact with live parts in any event.
  5. New more secure cable entry gland. It is virtually impossible to pull the cable out of this component part.



A professional Luminaire for the professionals and all these improvements can be fitted to any of our earlier generation of the Mark II units.

• 'Beam angle' = 50% of the centre beam peak [1/2 peak]. • 'Field angle' is where the light output falls to 10% of the centre beam peak [1/10 peak].  
• 'Cut off or beam spread' is the hard edge formed [100th peak]. • The field and cut off angles are the same when applied to the Silhouette.



# Standard Specification

Silhouette 1000W profile spot lamp house is fitted with:-

- 1 Aspheric reflector
- 1 240V or 120V lamp slide complete
- 1 Yoke with fixing holes to DIN standard (the centre hole is tapped to take a 5560 BS 4015 spigot where applicable)
- 1 1.5 metre cable
- 4 Beam shaping shutters in one unit
- 4 Mounting screws with grovers.

Silhouette lens tubes are fitted with:-

- 1 Filter Frame
- 2 Adjustable mobile lenses enabling beam angle adjustment as follows:-  
 Silhouette 40 cut off angles - 29°-46°  
 Silhouette 30 cut off angles - 22°-40°  
 \*Silhouette 25 cut off angles - 15°-32°  
 \*Silhouette 15 cut off angles - 11°-23°  
 \*Silhouette 10 cut off angles - 9°-20°

\* For convenience and perfect balance the yoke can be transferred to the lens tube mounting positions.

## General Information

The robust lamp housing is constructed in aluminium alloy, finned to ensure maximum heat dissipation. The entire outer casing of the luminaire is in black matt textured epoxy coating, stoved to a tough finish to withstand knocks and abrasions.

There are five variations of lens tube designed to meet a variation of beam spread between 9° and 46°. All are completely interchangeable by means of four Allen screws securing the lens tube to the lamp house.

Beam shaping shutters are provided as a separate item mounted between the lamp house and lens tube enabling a sharp or soft edge cut off where required.

The handles controlling shutter action are within the outer measurement of the lamphouse when fully closed to prevent damage in transit.

A particular advantage of this luminaire is its focusing system, using two mobile lenses; this facilitates a wide range of beam angles within a selected lens tube. The front lens determines the beam angle while the rear lens is used to focus the spot to a soft or hard edge. The control knobs screw tight to the lens tube securing the selected focus. A graduated scale is located parallel with the lens slide slot enabling a particular setting to be recorded.

The patented design of aspheric reflector together with the carefully selected lens combinations, enable the user to vary the Beam/Field ratio from 1:3 to 1:1. A patented reflector which ensures an even light output with less than 2 to 1 variations across the field is also available.

A special feature is the isolating removable lamp tray allowing inspection or lamp cleaning with complete safety and the easy lamp adjustment for beam angle variation using an insulated thumb screw.

The sturdy colour frame runners mounted on the front of the lens tube will accommodate two DIN standard book form colour filter frames or a colour change unit.

The Luminaire requires very little maintenance. Access to the reflector for cleaning is easily gained by removal of the six mm Pozidrive screws securing the back plate and withdrawing the

complete reflector assembly. Lenses are positioned in castings by means of Circlips and are easily removed for polishing.

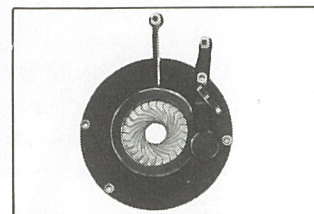
A useful accessory is the drop-in Iris, slotting into the gate to convert the Luminaire into an economical follow-spot. The gate will also accept a Gobo to project a sharply defined image of a selected subject.

An extra pivot point is provided on the yoke to reduce height where required and provide increased rigidity when in use as a follow spot.

## Accessories

### Iris/Blackout Assembly

The addition of this assembly between the shutter set and nose tube turns the Luminaire into a follow spot. The blackout is normally activated automatically by the thumb at the end of the iris travel, both levers are insulated and mounted below the lens housing for easy cool operation.



Iris/Blackout Assembly

### New Type "G" Clamp

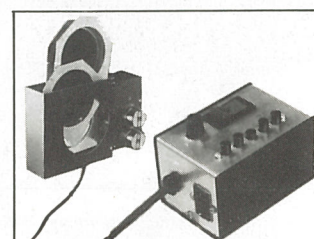
This specially shaped G clamp accepts and positively locks onto any barrel size between 1½" to 2½" outside diameter. It is very robust and constructed of 40mm wide x 10mm thick steel and has oversized wing nuts for firm lock off.



New Type "G" Clamp

### New Automatic Colour Change Unit

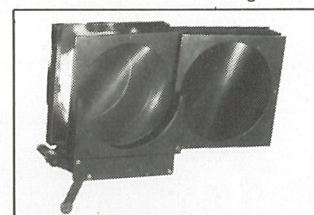
The 'Colorsette 4' motorised remote control colour change unit gives push button control of up to 4 colours. 2 sizes are manufactured to fit Silhouette 30/40 noses and the Silhouette 15/25 noses. Send for separate leaflet and full specifications.



New Automatic Colour Change Unit

### New Hand Operated Colour Change Unit

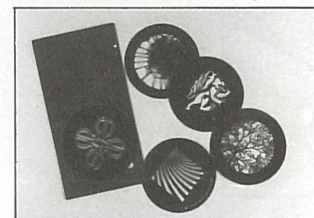
Colorsette 6 has a change facility for up to 6 colours, is easily reversible and can be operated from either side of the lamp housing. Manufactured in two sizes to fit Silhouette 15/25 noses and Silhouette 10 nose. Send for separate leaflet and specifications.



Hand Operated Colour Change Unit.

### Gobo's

A full range of exciting specially designed shapes, patterns and outline pictures are available. Gobos are also tailor-made to customer requirements. Send for separate leaflet and specifications.



Gobo's

### Spare Colour Frames

Book form colour frames are available these are designed for easy waste free filter cutting.

### Spare Shutter Sets.

Sets are available. Prices on request.

### Follow spot handles.

Follow spot handles are available. Prices on request.

Spotlight type	Base	FCH*	Type	Power	No.	Colour temp.	Make	Lamp life	Working position
SIL 1000	G x 9,5	55 mm	halogen-quartz	650W 240V	CP 23	3200 K	Thorn	100 h	2 x 45°
				650 W 240V	T 12		Thorn	750 h	2 x 90°
				650 W 240 V	T 10		GEC	400 h	2 x 45°
				1000 W 240V	CP 24		GEC	150 h	2 x 45°
				1000 W 240 V	T 9	3200 K	GEC	400 h	2 x 45°
				1000 W 240 V	T 11		Thorn	750 h	2 x 90°
				1000 W 240 V	CP 24		Thorn	200 h	2 x 45°
				1000 W 240 V	FEL		Sylvania	300 h	
				1000 W 120V					

\* Filament Centre Height

# CCT theatre lighting limited

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\* C.C.T. reserve the right to change specifications and materials without prior notice. All photometric data given is typical and does not form part of the specifications.