



PROFESSIONAL SHOW LIGHTING

# STAGE SCAN



## STAGE SCAN: A STAR ON STAGE

With STAGE SCAN, Clay Paky offers an exciting new alternative for lighting designers working in theatres and television sets and on concert tours. This fixture can also bring the breathtaking quality of professional lighting to the disco, particularly larger, trend-setting venues that insist on the best and most creative lighting systems.

In addition to its excellent design and the proverbial reliability that distinguishes all Clay Paky projectors, STAGE SCAN provides designers with an unprecedented range of creative effects and a host of practical features that set this luminaire in a class of its own, creating a new benchmark for the Professional Show Lighting sector.

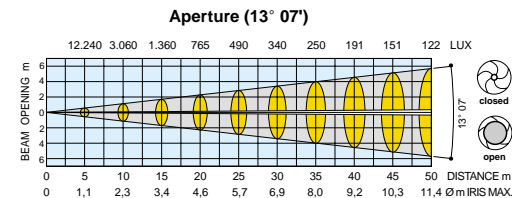
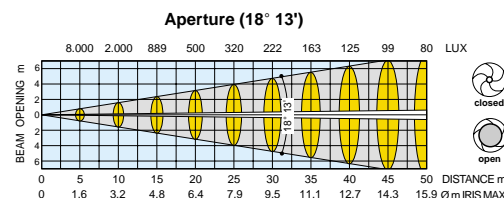
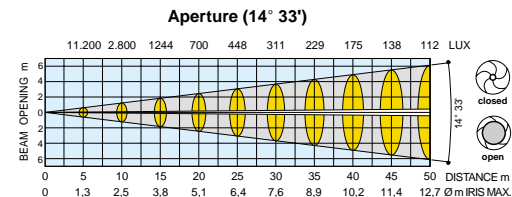
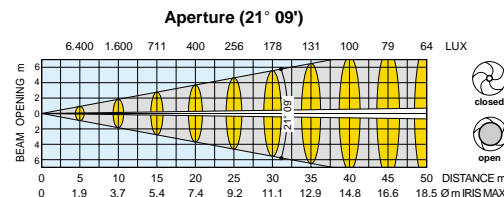
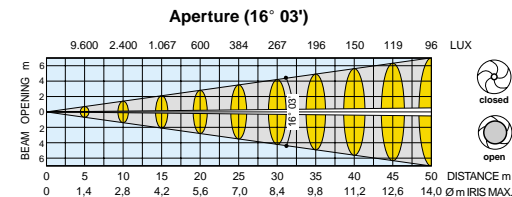
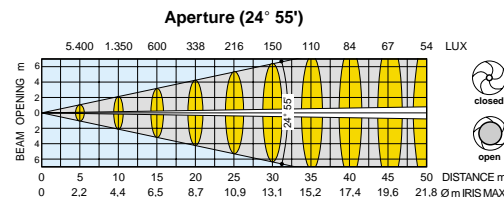


## IMPECCABLE PROJECTION QUALITY

The design features of the optical system and the high quality components used guarantee that STAGE SCAN can deliver a totally hard-edged, uniform beam, also at maximum aperture, thus delivering the levels of excellence that have become indispensable for theatrical and television work.

Precise image focusing at all apertures and distances is based on an innovative variable focal length system denominated Multi Step Zoom (MSZ), a Clay Paky exclusive that allows

six different lens apertures: 13°, 14,5°, 16°, 18°, 21°, 25°, to be selected direct from the control desk. This design simplifies programming with respect to continuous zoom systems and combines totally straightforward operation with perfect focusing.





# LAMP

The high power OSRAM HMI 1200 is the most widely acclaimed lamp in professional applications because of its superior luminous efficiency (110,000 lumen) and its capacity to maintain the original colour temperature longer (750 hours average lamp life).

STAGE SCAN integrates this excellent lamp with a series of innovative functions including hot restrike, so designers don't have to wait around before switching on, even after accidental power-downs or blackouts caused by electrical storms etc..



The hot restrike function has also made it possible to incorporate an automatic lamp switch-off feature that can be activated after 5 minutes of zero control signals.

Alternatively, STAGE SCAN can be switched on and off directly from the control desk on a dedicated channel.

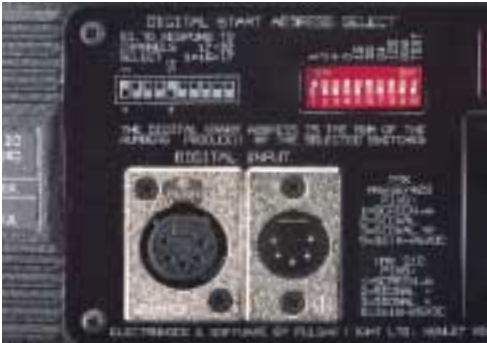
This level of control over lamp operation makes for savings in power consumption and better exploitation of valuable lamp hours.



# ELECTRONICS

STAGE SCAN's electronics section was designed expressly by Pulsar Light of Cambridge, long standing specialists in the development of reliable and highly efficient circuitry for Clay Paky luminaires. There are 16 control channels covering all the operating functions, plus an additional channel that can be activated to switch the lamp on or off direct from the desk.

STAGE SCAN is fully compatible with standard DMX512 and RS232 (PMX) digital signals so lighting designers can freely choose the controller they prefer.



The inputs are protected against accidental injection of mains voltage, while a self-diagnostic routine makes it possible identify faults fast.

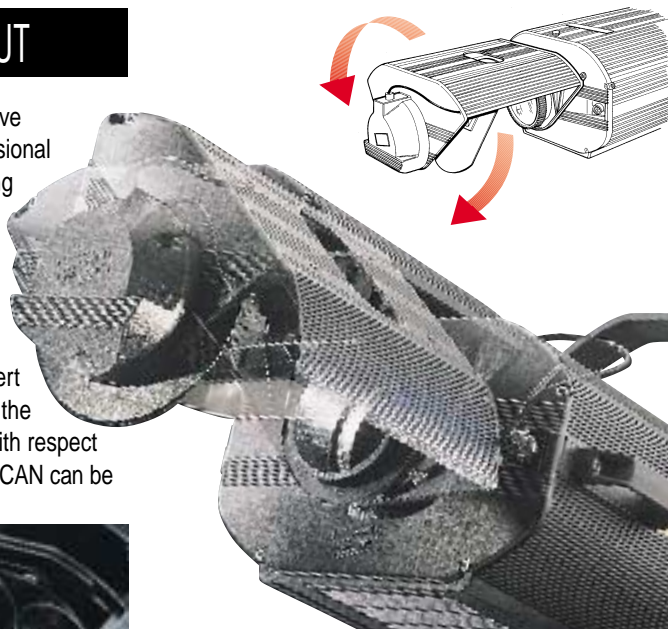
CHANNEL																	
%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	IRIS	Color wheel	5 facets prism Frost fixed prism	Dimmer stopper strobe	PAN	TILT	Additional lens disc	FOCUS	Indexed rotating prism change	10 Prism rotation	Static gobo change	Rotating gobo change	Gobo rotation	COLOR MIXING			Lamp strike
100%																	ON
75%																	
50%																	ON OFF
25%																	
0%																	OFF

The rear panel of the luminaire is equipped with a luminous address channel display and LEDs showing the type of input signal (DMX or PMX) and status (Data Error).



## PRACTICAL THROUGHOUT

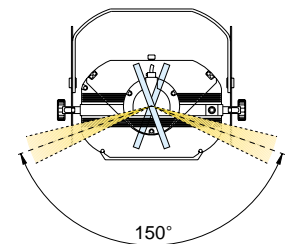
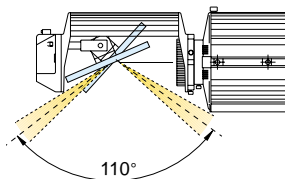
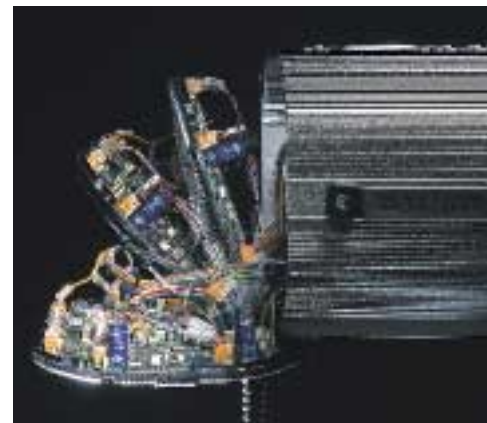
STAGE SCAN is packed with innovative features that recommend it for professional use, including the possibility of working on the effects without switching off the lamp and simple and rapid power input voltage and frequency changeover to make the luminaire immediately compatible with local national standards during world concert tours. Another practical advantage is the full 360° rotation of the mirror head with respect to the projector body so that STAGE SCAN can be



enables STAGE SCAN to be positioned vertically, while the second, which is wheel mounted for easy transport, also allows the fixture to be turned about its axis.

The accommodation of the electronic section is particularly practical: just flipping open the rear cover provides immediate access to all cards and circuitry contained in a single block, ensuring total ease of maintenance.

STAGE SCAN is equipped as standard with three important features: a lamp hour meter, power factor correction system for low power consumption, and an efficient silencing system - indispensable when working in the intimate atmosphere of theatres or television studios.



maintained in a horizontal or vertical position while projecting in any direction with respect to its axis.

The projector can also be supplied with two optional stands for floor mounting: the first



## SAFETY

It goes without saying that STAGE SCAN is CE certified in compliance with current safety standards. We have already mentioned the facility for working on the effects section without killing the lamp: this is possible thanks to the segregated access to the lamp zone and the effects section in the projector body. Lighting designers can work in total tranquillity without risking burnt fingers or burns from UV radiation emitted by the lamp, which is completely separate and protected in its housing. And when it's time to change the lamp, opening the cover automatically breaks a safety microswitch contact that disconnects the power supply. Even the conventional fuses have disappeared, replaced on this model with a highly efficient and safe automatic dual pole cut-out switch.

Mechanical safety equipment includes the lateral transport handles and the attachment for the obligatory safety chain when the projector is mounted on overhead bars.



## GENERAL CHARACTERISTICS

### POWER SUPPLY

- 200-220V/60 Hz or 220-240V/50 Hz versions.

### LAMP

- HMI 1200, 110,000 lumen
- Electronic igniter for hot restrike function
- Lamp hour meter
- Standard power factor correction; total power consumption is 1600 VA.

### MOTORS

- Stage Scan incorporates 20 microstepping motors with full microprocessor control.

### OPTICAL SYSTEM

- Main optical system in diecast aluminium, comprising a twin lens condenser and special high luminous efficiency parabolic mirror
- Electronic focusing.

### MIRROR MOVEMENT

	Pan	Tilt
Reflection angles	150°	110°
Maximum rotation speed	0.4 s/150°	0.3 s/110°
Movement resolution	± 0.3°	± 0.2°

### ELECTRONICS

- Developed exclusively for Clay Paky by Pulsar Light of Cambridge
- Three microprocessors for the receipt of control signals and real time simultaneous control of all projector functions.

### INPUTS

- DMX 512 serial digital input
- RS 232 (PMX) serial digital input.

### SAFETY STANDARDS

- Conforms to EC low voltage directive 73/23/EEC and EMC directive 89/336/EEC
- Protection category IP 20
- Power cord complies with IEC standards.

### SAFETY DEVICES

- Microswitch to disconnect power when lamp cover is opened
- Automatic dual pole cut-out switch
- Signal inputs protected against fortuitous injection of mains voltage or static electricity discharges.

### COOLING SYSTEM

- Forced cooling with axial fan and optimised air circulation by means of specially designed internal ducting.

### BODY

- Diecast and extruded aluminium
- Epoxy powder coated
- Four lateral transport handles.

### MIRROR HEAD

- Can rotate through 360° with respect to the projector body
- Graduated for easy positioning
- Fastening point for safety chain.

### MOUNTING BRACKET

- Aluminium bracket with epoxy powder coating
- Six installation positions - 25 mm spacing
- Bracket can be adjusted through 100° with graduated scale for easy positioning
- Fastening point for safety chain.

### OPERATING POSITION

- Any position on horizontal plane.

### WEIGHT (Kg)

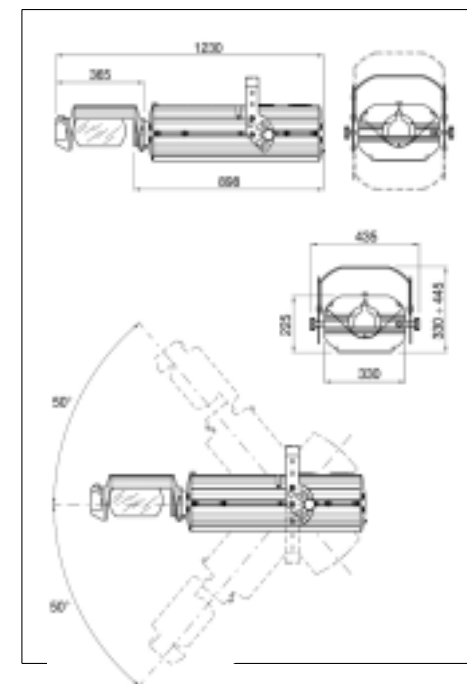
	Net	w/packing
STAGE SCAN without mirror head	40	43
Mirror head	3.1	4.6

### PACKAGING

- On request, Stage Scan can be supplied in a custom made flight case, constructed in high quality materials, with or without casters.

### ORDER CODES

C11155	STAGE SCAN
C21061	STAGE SCAN mirror head
L10030	Osram HMI 1200 GS lamp
C31144	STAGE SCAN fan cover
F21120	Flight case with casters
F21121	Flight case without casters
C21029	Static vertical floor stand
C21030	Adjustable wheel mounted floor stand





## GRAPHICS WITHOUT LIMITS

With STAGE SCAN, the only limit to your creativity as a lighting designer is the number of combinations - which is infinite - that are available to you when you use the colour system and special effects filters together with the gobos, prisms and their rotation.

An especially useful and innovative feature is the indexing of the rotating prisms, which is the same as for the rotating gobos.

Thanks to the indexing, a specific graphic combination created with one fixture can be easily be copied and repeated on several projectors, for highly spectacular effects.

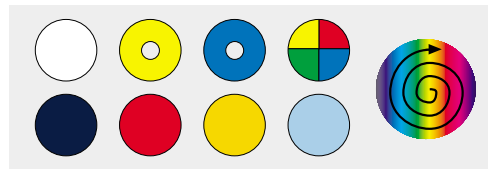


## TOTAL COLOUR

With STAGE SCAN even the most demanding of lighting designers can also create the most elusive colour tones, by means of the RGB colour mixing system - a Clay Paky exclusive produced with carefully selected dichroic filters superimposed on each other with incredible speed, precision



and uniformity by the sophisticated control system. All of the colour tones are totally pure and can be repeated whenever you want them. The chromatic effects of STAGE SCAN are increased by the special effects filters, which generate beams with two concentric colours, 4-colour beams and ultraviolet light; lastly there are two filters for converting the colour temperature from 6000 °K to 3200 °K with the hot filter and 6500 °K with the cold filter.



## GOBO

The gobo unit consists of two independent wheels operating either individually or in conjunction with each other. The first accommodates 4 interchangeable standard M-size metal gobos with fixed position. The second wheel is dedicated to the 4 interchangeable rotating gobos, indexed over 540°, two of which are made of glass with extremely high-definition special images.

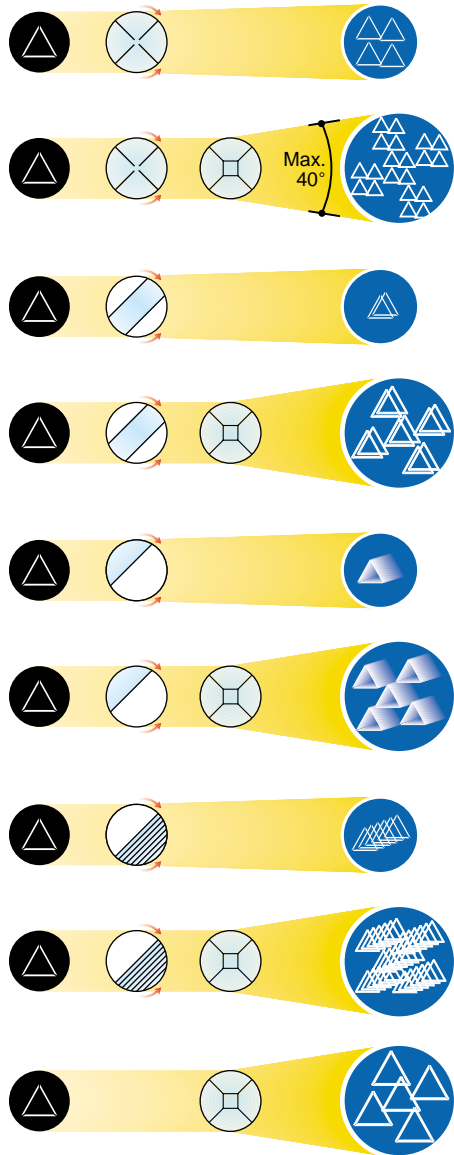
Gobo rotation in either direction can be continuously adjusted from the infinitesimal minimum values to 150 rpm, a top speed not normally reached by units of this type.

To make it even easier to be creative, STAGE SCAN comes supplied with 10 supplementary interchangeable M-size gobos housed in a stash in the fixture ready for use whenever you want them.



Clay Paky has a vast catalogue of standard interchangeable gobos in metal and dichroic glass with colour images and in glass for high-definition graphic and photographic images. Clay Paky can also produce new customised gobos to Clients' specifications.



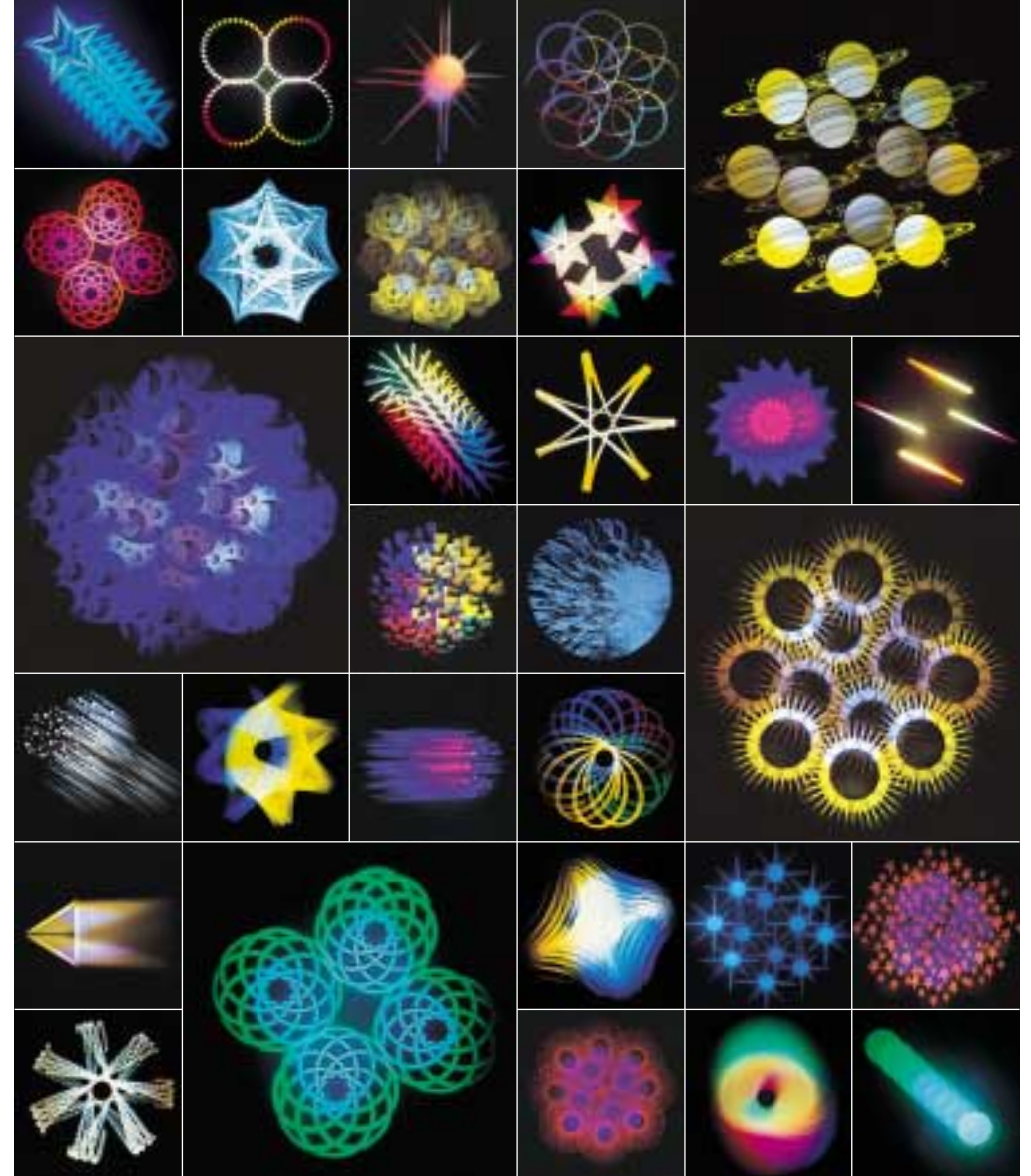
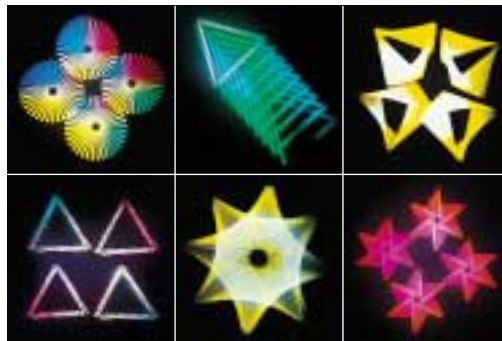


## PRISMS

The prism unit has 4 rotating prisms, indexed over 540°, and one fixed prism, all with different facets for achieving a multitude of spectacular effects.

Like the gobos, the prisms can also rotate in either direction at adjustable speed.

The combination of effects of the four rotating prisms with the fixed prism multiplies the variety and beauty of the effects you can create.







## IRIS

The iris, which operates with outstandingly low noise, enlarges and reduces the light beam so spectacularly that it can be used as an effect in its own right.

Its movement is linear and fully adjustable, and with the aid of a patented Clay Paky device, can reach an extremely high maximum speed.

## DIMMER, STOP, STROBE

The dimmer effect ranges from 0 to 100% with totally uniform gradual transition at fully adjustable speed, and also enables you to black out the beam instantly.

The frequency of the strobe effect can be adjusted from 1 to 7 flashes per second, and is especially effective because the black-out time is so short - only 70 milliseconds.



## DIFFUSION

Every beam projected by STAGE SCAN can be diffused with Frost filters, to create highly evocative, spectacular backgrounds and effects. You can change gradually from a concentrated beam to an ever wider beam, and there are three different Frost effects: one distinct, one intermediate and one - the unique Clay Paky photographic haze effect - which leaves the graphic effect used with it visible.





## COLOUR FILTERS AND GOBOS

STAGE SCAN gives you a huge choice of colour filters and interchangeable gobos.

The filters used are mostly dichroic, made with special optical glass which is resistant to high temperatures.

In addition to the standard filters, STAGE SCAN can mount colour filters of any tone as an optional.

With STAGE SCAN, Clay Paky also brings you countless different metal and conventional gobos, gobos with the pure colours of dichroic glass or special glass gobos with high-definition photographic effects.

And if these don't meet your needs, you can opt for the Multicolor gobos with superimposed glass, or commission Clay Paky to produce customised gobos designed to your specification (e.g. with brand names, designs or messages of your choice).

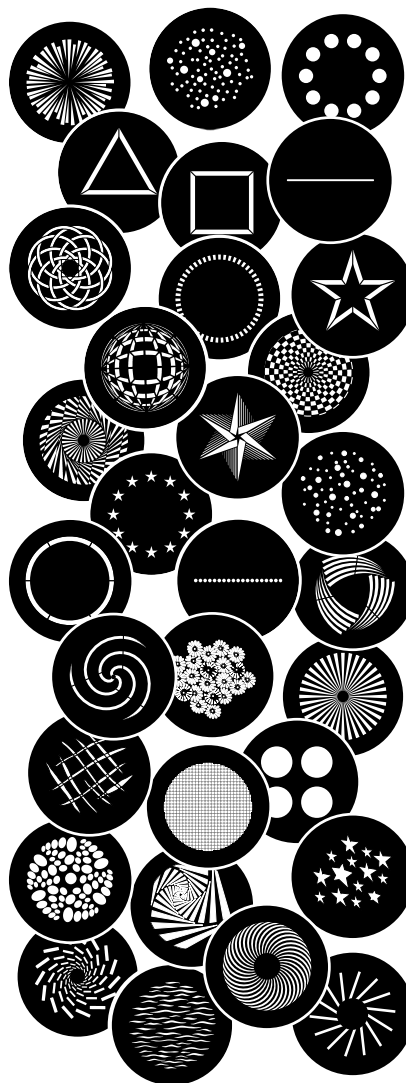
The illustrations show a few examples of colour filters and gobos of the various types mentioned.

If you would like to see the full range of gobos, ask Clay Paky or your nearest dealer for the gobo catalogue.

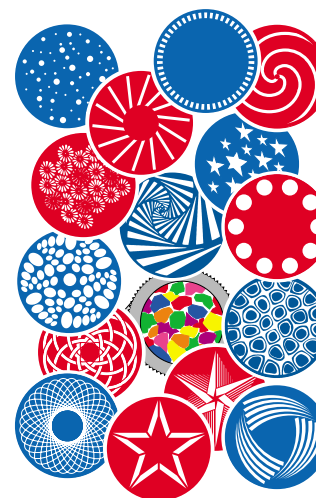
DICHROIC FILTERS Ø 47 mm



METAL GOBOS Ø 66 mm



DICHROIC GOBOS Ø 51.8 mm



MULTICOLOR DICHROIC GOBOS  
Ø 51.8 mm



PHOTOGRAPHIC GOBOS Ø 51.8 mm

