GALILEOIV1200GALILEOII1200GALILEOIV

GALILEOIV1200G

A.D. e progetto grafico ACANTO • Ph. AMATI E BACCIARDI

SCANNERSCANNERSCANNERS

I

GB A000371 rel. 1.00

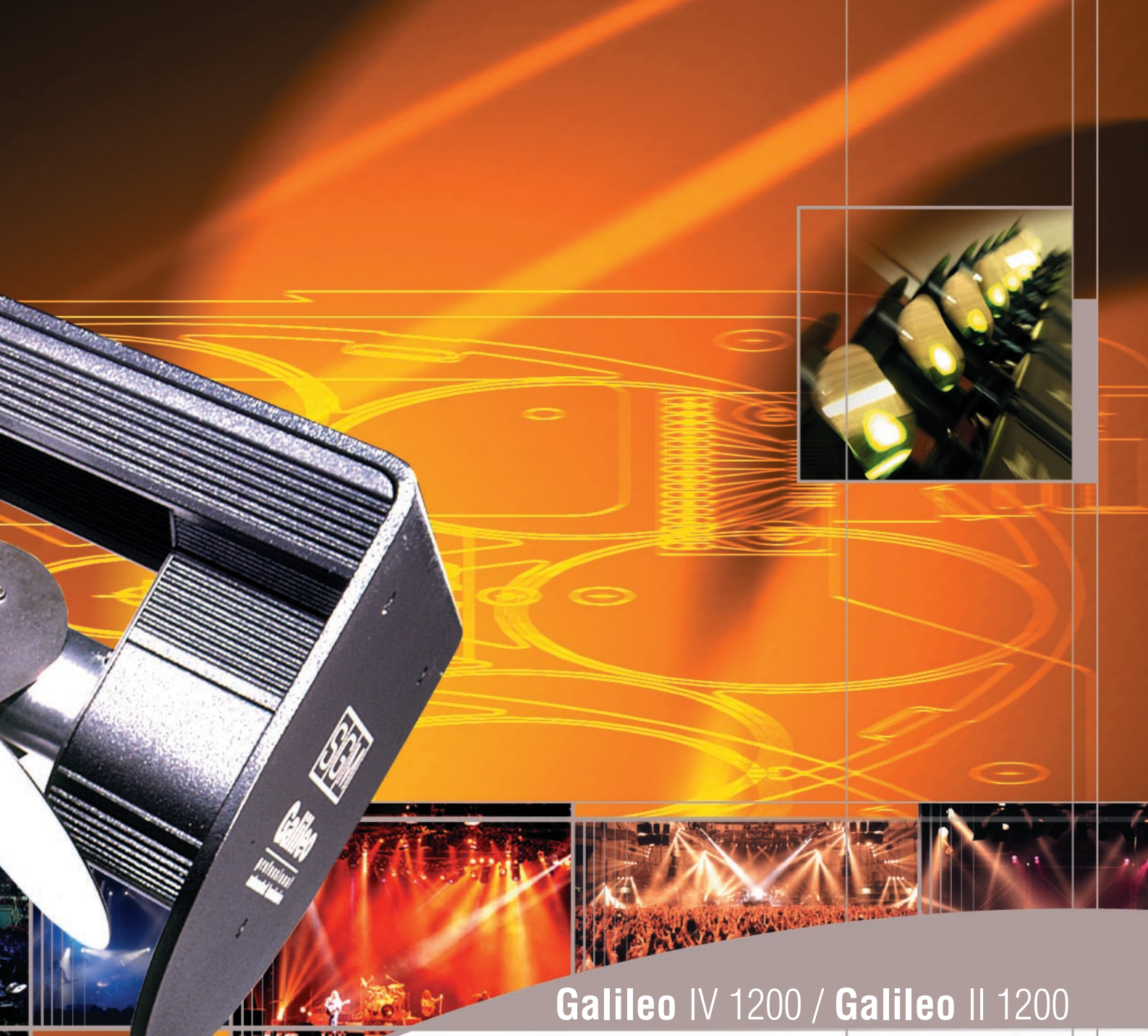
SGM LIGHT TECHNOLOGY®
Via Pio La Torre, 1 • 61010 Tavullia (PS), Italy
Tel. +39 0721 476477 • Fax +39 0721 476170
http://www.sgm.it • E-mail: info@sgm.it

Galileo IV 1200 / **Galileo** II 1200

Professional, technological, intelligent.

SGM LIGHT TECHNOLOGY

GALILEOIV1200GALILEOII1200GALILEOIV1
GALILEOIV1200GALILEOII1200
GGALILEEOIV12000GGAA



Galileo IV 1200 / **Galileo** II 1200

The Galileo series of intelligent fixture are high-power scanners with professional performance based on the great experience accumulated by SGM through years of research in the entertainment lighting field.

Some of the features which distinguish them are: high-speed colour and gobo changes, low-noise iris, high-speed gobo and prism rotation, precision linear dimmer, high strobe rate, 16-bit scanning resolution and the possibility of running colour changer, gobo changer and strobe in sync with the music .

The electronic system is modular and each function has its own independent control card: this facilitates maintenance to the utmost and cuts running costs.

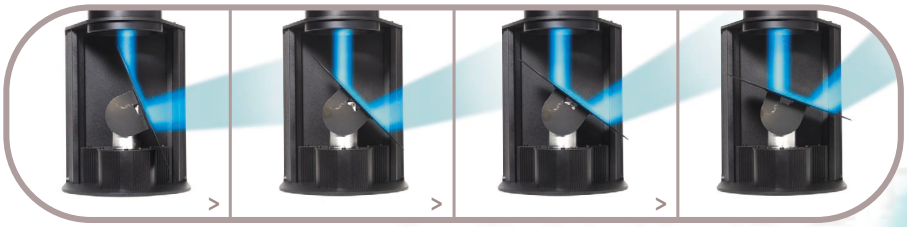
It was decided to make fixture handling as easy as possible by fitting two handles on the sides and a grip on the rear panel, thus facilitating operators' work during installation and use.

Galileo scanners can be used for a wide variety of applications: from installation in professional sectors such as theatres and television studios to more widespread applications such as bands, entertainment venues, clubs and permanent installations.

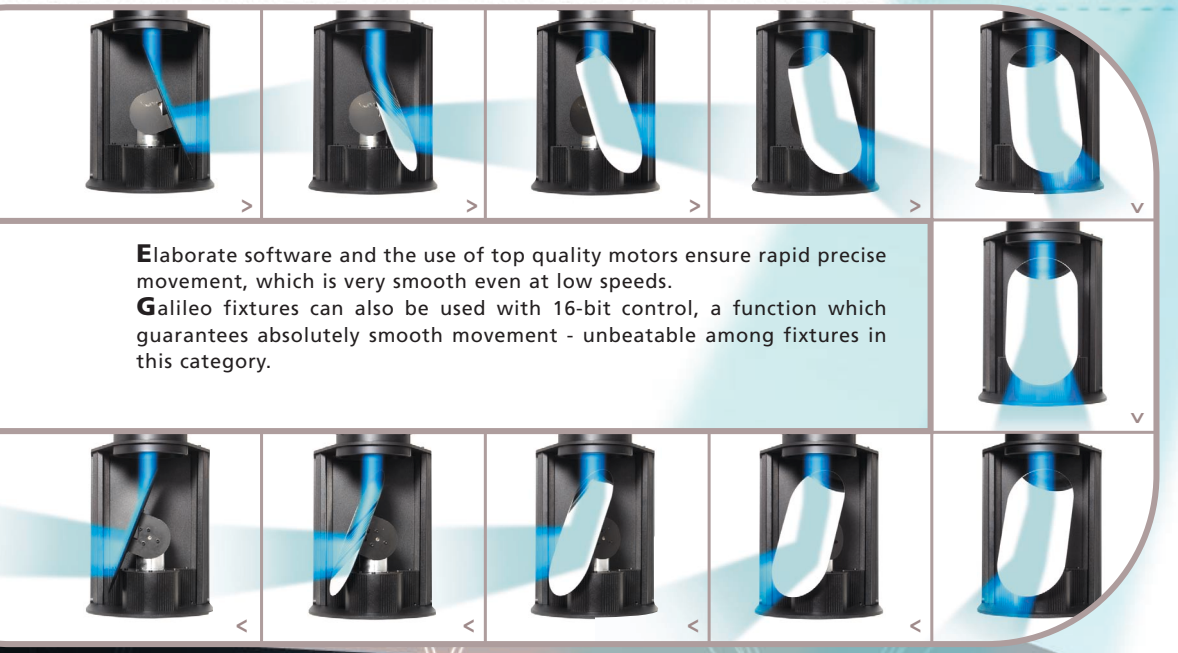
MIRROR

Galileo intelligent fixtures' mirror uses a "wireless" system designed by SGM's Research & Development Centre.
Thanks to this system, the cables which carry the power supply to the motors and often cause faulty operation aren't to be seen.
Manufactured from avant-garde materials, the mirror is extremely reflective and reduces luminous output loss to a minimum.
The mirror is moved by two fast reliable motors which enable it to **Tilt 90°** in 0.2 seconds and **Pan** through **180°** in 0.4 seconds.

TILT 90°



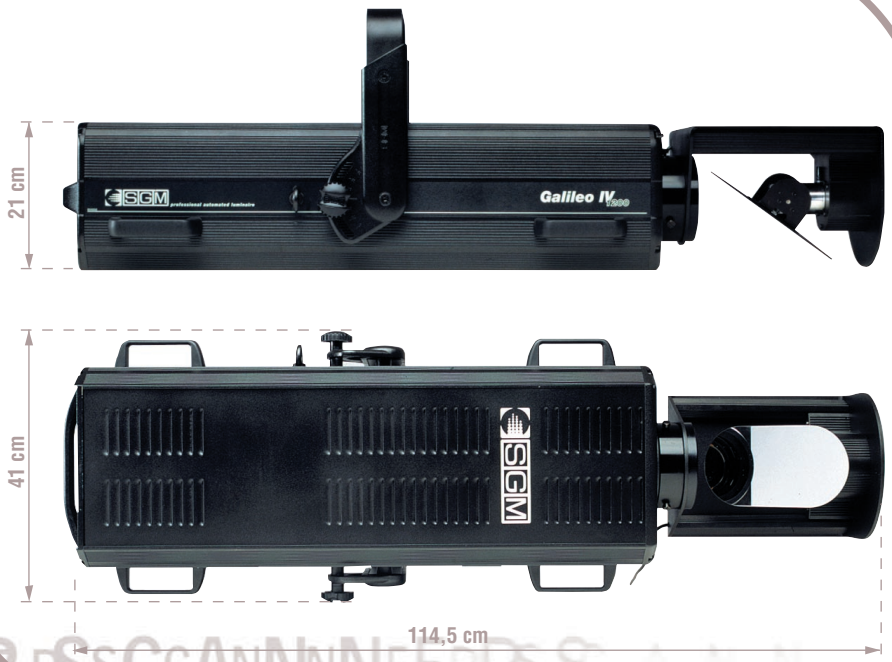
PAN 180°



Elaborate software and the use of top quality motors ensure rapid precise movement, which is very smooth even at low speeds.
Galileo fixtures can also be used with 16-bit control, a function which guarantees absolutely smooth movement - unbeatable among fixtures in this category.

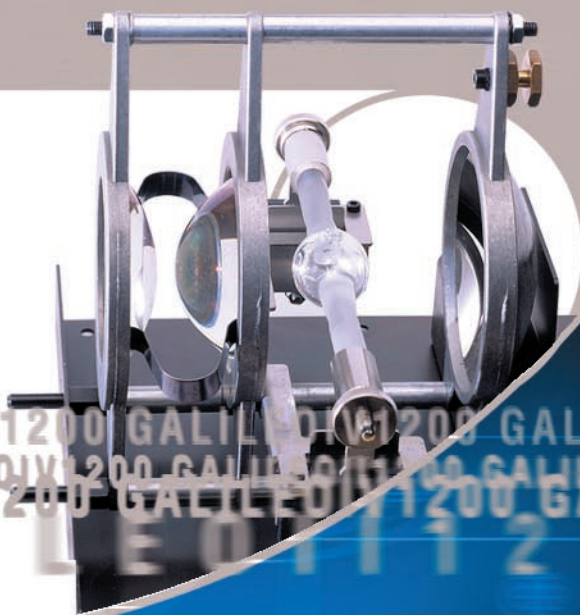
It's also possible to invert scanning direction, thus enabling problem-free use of fixtures installed facing each other, which would otherwise move in opposite directions.

The scanner head can be separated from the fixture body and turned through 360° to allow precise positioning under any installation conditions.



BUILT-IN "CONTROL" MICROCOMPUTER AND PRACTICAL DISPLAY

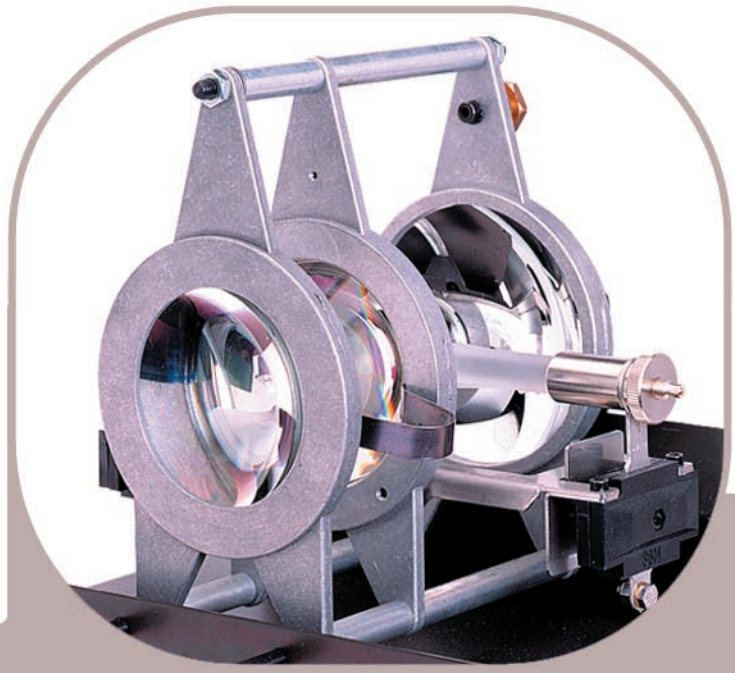
Galileo scanners are equipped with a microcomputer that enables to customize the fixture in the manner most suited to the type of installation.
By means of the display, from which it's possible to control all the functions, start addresses can be allocated, Pan and Tilt movements set, information regarding lamp life and fixture operating times obtained, test programs run, etc.



LAMP

Galileo scanners are fitted with a 1200 Watt HMI discharge lamp.
Its luminous flux of no less than 110,000 lm/W, sfc 15.5 base, 5,600°K colour temperature and 750 hour life make it the ideal choice for such powerful fixtures.

Galileo IV 1200 / **Galileo** II 1200



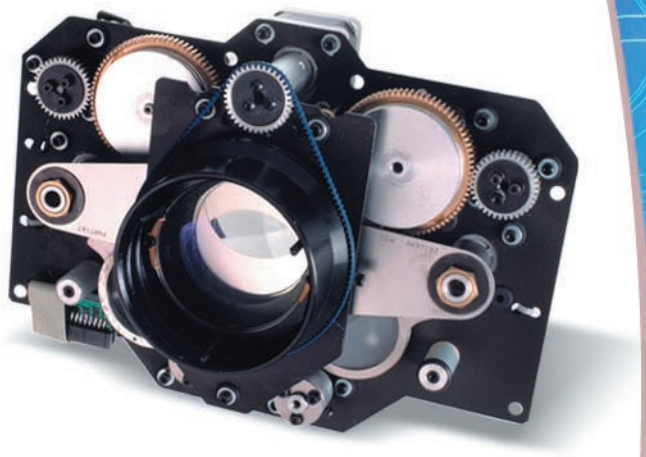
OPTICAL GROUP

The special optical group is made from die-cast aluminium with a twin condenser and high output mirror-finish reflector.
Thanks to the condenser's twin lens, the amount of light emitted is exploited to the utmost, concentrated and strengthened.
The beam is perfectly uniform and the light evenly distributed without any concentration or halos in the area being illuminated.
The top quality lenses have a high transmission coefficient and undergo special anti-reflection treatment.

STROBE/SHUTTER

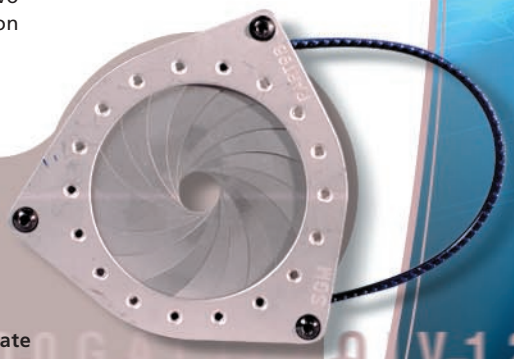
The flash rate of Galileos' very fast, quiet strobes can be adjusted from 0.5 to 12 flashes per second.
This high flash rate creates an effect very similar to that obtained using fixtures purpose-built for this use.
The shutter system, made up of two blades instead of one, ensures total blackout, emphasizing the stroboscopic effect.

The strobe can also be run in sync with two audio bands, creating unusual settings and choreographic effects.
The strobe can be enabled along with the dimmer, thus obtaining a strobe effect with adjustable intensity.



DIMMER

Galileo scanners are fitted with a linear mechanical dimmer which, by moving two blades towards the centre, ensures extremely precise, continuous smooth regulation of the amount of light fed out: from true zero to 100%.



IRIS

The innovative exclusive iris diaphragm group is fitted with a device that enables it to open and close at an unbeatable speed: 0.1 sec.
Beam width variation is perfectly smooth and under operators' complete control.

As well as being used to just change beam width as required, the iris can also create eye-catching visual effects that can't be obtained with other spots.
The system's very low noise level (<30 dB), allows it to be used for applications in which this feature is indispensable, such as theatres and television studios.

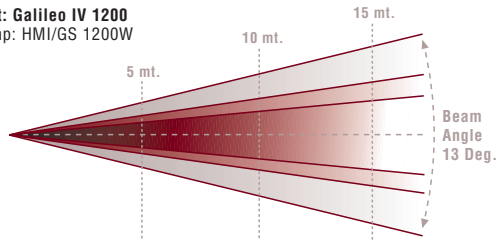
Galileo IV 1200

ELECTRONIC FOCUS

The **Galileo IV 1200** has electronic focussing, thus enabling images projected from any angle and any distance to be focussed smoothly and with extreme precision.

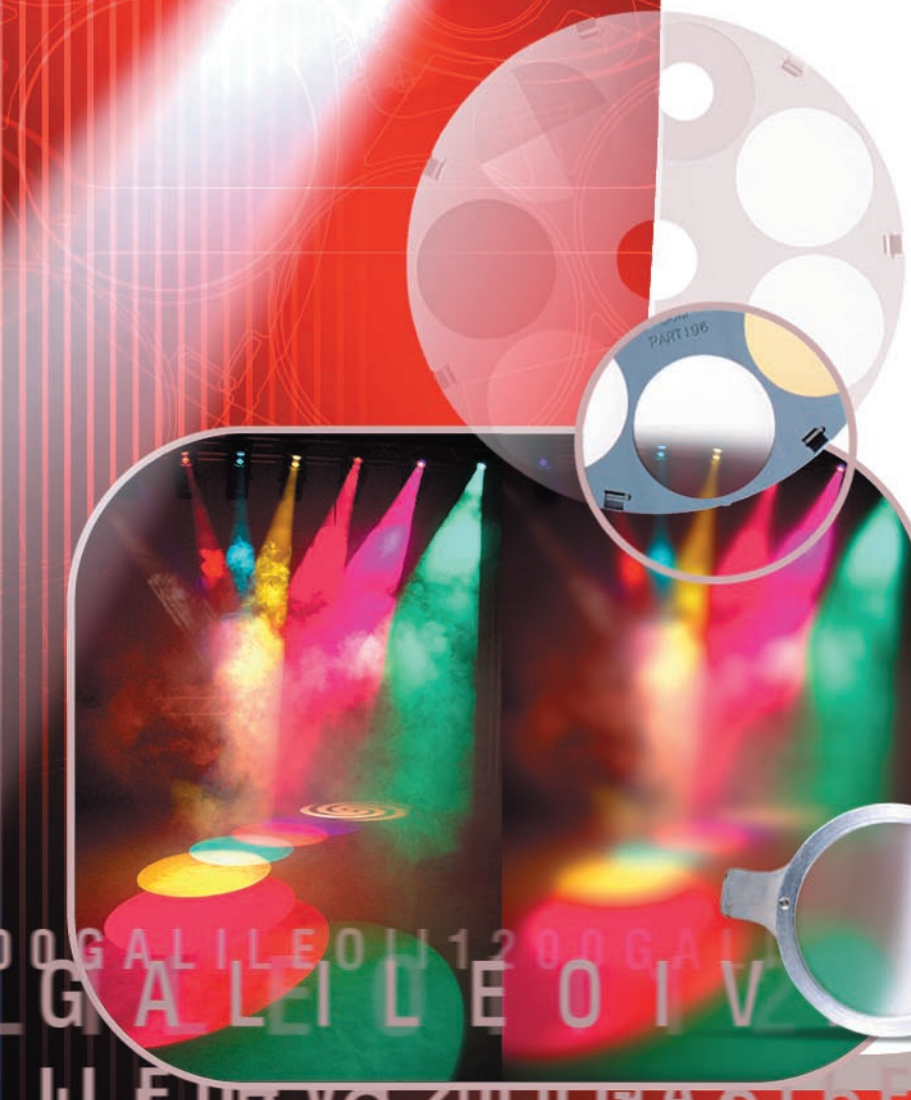
Eye-catching out-of-focus effects can also be created.

Unit: Galileo IV 1200
Lamp: HMI/GS 1200W



Lux Center:	**7800**	**1950**	**850**	
Foot Candles:	**729**	**182**	**79**	
Field size Ø (mt):	**1.13**	**2.26**	**3.41**	
Field size Ø (ft):	**3.71**	**7.41**	**11.19**	
Lux Center with Wash:	**2800**	**720**	**350**	Wash frost
Foot Candles with Wash:	**262**	**67**	**33**	
Field size with Wash Ø (mt)*:	**1.76**	**3.53**	**5.3**	Wash frost
Field size with Wash Ø (ft)*:	**5.77**	**11.58**	**17.39**	

(*) *Calculated at 50% of maximum (beam center) luminous intensity*



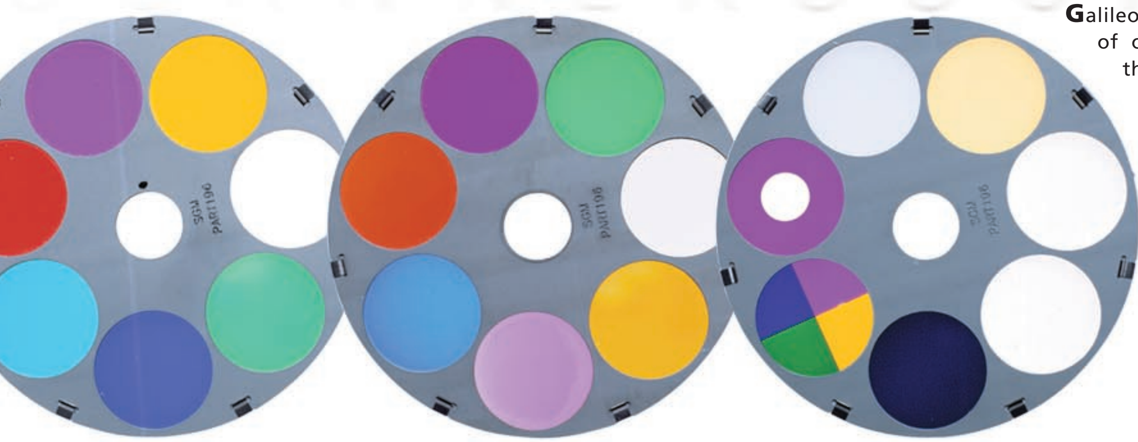
FROST FILTERS

Galileo IV 1200 scanners are equipped with two frost filters, with which two different levels of diffused beam can be obtained: one Soft Edge, the other a more intense Wash with wider beam diffusion.

The frost filters can be used to project diffused beams which are ideal for creating coloured backgrounds and washes.

Galileo IV 1200

COLOURS



Galileo IV 1200 scanners offer a wide range of colours. In fact, they're fitted with three colour wheels with top quality dichroic filters, carefully selected to ensure perfectly matching colours.

The filters can be easily changed, so custom requirements can also be met and by combining these filters, no less than 75 colours can be created.

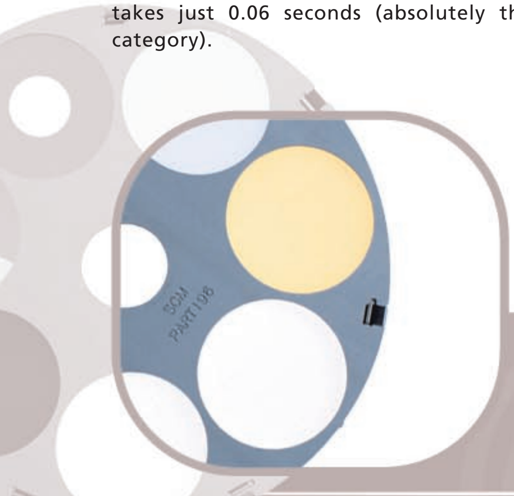
The special filters mounted on the third wheel are: a UV filter, a 4-colour filter, a concentric 2-tone filter, a soft-edge frost filter and two colour conversion filters.

Colour changes can be carried out with full colours or two-tone beams via analog selection.

As well as colour selection, other functions with high visual impact can also be enabled, such as running colour changes in sync with the music or a rainbow effect, i.e. continuous rotation of all the available colours at adjustable speed.

By using the colour channel along with the strobe channel, an "autoshade" effect can be added to the colour, blacking out the spot for a short moment during colour changes.

Colour changes are imperceptible to the human eye, as the changeover takes just 0.06 seconds (absolutely the fastest among fixtures in this category).



COLOUR TEMPERATURE CONVERSION (CTC) FILTERS

Galileo IV 1200 scanners are fitted with two colour temperature conversion (CTC) filters which can be combined with the whole range of obtainable colours.

They offer the possibility of lowering colour temperature to 3,200°K, thus obtaining light with a warmer tone (CTO), ideal for television use, or raising it to 6,500°K to obtain a colder tone (CTB).

PRISM

Galileo IV 1200 intelligent fixtures can create truly innovative, interesting graphic and decorative effects, thanks to their use of three prism lenses: one fixed 9-facet lens and two rotating lenses whose variable speed can be programmed up to a maximum of 350 rpm in both directions.
These enable to obtain 3-D projections and the rotating prisms can be superimposed on the fixed prism.

GOBO GROUP

The gobo group on the **Galileo IV 1200** scanners is made up of two independent wheels, each with four gobos and an open-white position. Superimposing the wheels allows 25 different combinations to be obtained, giving operators ample possibilities of choice.

Both wheels can be rotated clockwise and counterclockwise. The two wheels' rotation speed and direction are independent and can be set according to operators' requirements.
A sophisticated software system allows gobo positions to be stored and constantly maintained during mirror movement (indexed).

Gobo changes can be carried out very rapidly and imperceptibly, or analog changes used to cross over slowly from one pattern to another. Gobo changes can also be run in sync with the music and with or without blackout.
The group has a maximum speed of 46 rpm and a minimum of 1.5 and is without doubt one of the fastest among the fixtures in this category.

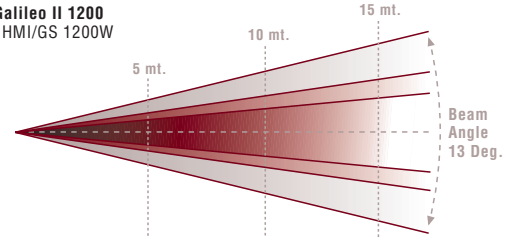
All gobos can be easily replaced, giving operators the possibility of installing new patterns easily and quickly. As well as the gobos fitted as standard, SGM also has a wide selection of gobos available, which can be used both to sculpt beams and project images.
The complete pattern library comprises three different types of gobos: metal, dichro and glass.

Galileo II 1200

MANUAL FOCUS

Focussing the **Galileo II 1200** is very easy, fast and precise, using the (Focus) lens on the front of the fixture.

Unit: Galileo II 1200
Lamp: HMI/GS 1200W



Lux Center:	**7800**	**1950**	**850**	
Foot Candles:	**729**	**182**	**79**	
Field size Ø (mt):	**1.13**	**2.26**	**3.41**	
Field size Ø (ft):	**3.71**	**7.41**	**11.19**	
Lux Center with Wash:	**2800**	**720**	**350**	Wash frost
Foot Candles with Wash:	**262**	**67**	**33**	
Field size with Wash Ø (mt)*:	**1.76**	**3.53**	**5.3**	Wash frost
Field size with Wash Ø (ft)*:	**5.77**	**11.58**	**17.39**	

(*) *Calculated at 50% of maximum (beam center) luminous intensity*

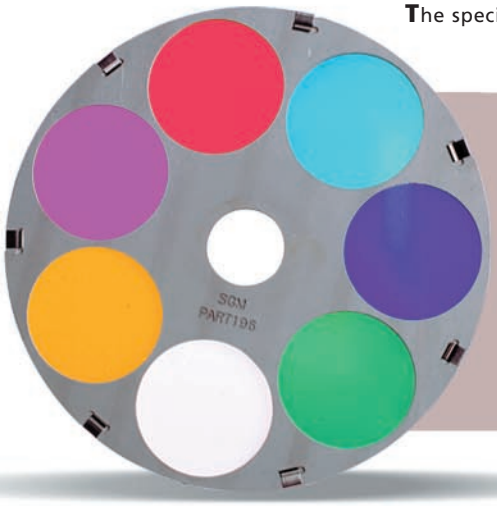
FROST FILTER

Galileo II 1200 scanners are equipped with a frost filter with which a diffused beam, ideal for creating coloured backgrounds and colour washes, can be projected.

COLOURS

Galileo II 1200 scanners are fitted with a colour wheel with 6 top quality dichroic filters, carefully selected to ensure perfectly matching colours. The filters can be easily changed, so custom requirements can also be met and combining these filters, no less than 15 colours can be formed.

The special filters fitted as standard are: a UV filter, a frost filter and a colour conversion filter.



Colour changes can be carried out with full colours or two-tone beams via analog selection. As well as colour selection, other functions with high visual impact can also be enabled, such running colour changes in sync with the music or rainbow effect, i.e. continuous rotation of all the available colours at adjustable speed.

By using the colour channel along with the strobe channel, an "autoshade" effect can be added to the colour, blacking out the spot for a short moment during colour changes.

Colour changes are imperceptible to the human eye, as the changeover takes just 0.06 seconds (absolutely the fastest among fixtures in this category).

COLOUR TEMPERATURE CONVERSION FILTER

The colour temperature conversion filter can be combined with the whole range of obtainable colours and offers the possibility of lowering colour temperature to 3,200°K, thus obtaining light with a warmer tone, ideal for television use.

PRISM

Thanks to the use of a 4-facet prism lens, **Galileo II 1200** scanners are able to create truly innovative, interesting graphic and decorative effects.

GOBO GROUP

The gobo group on **Galileo II 1200** scanners is made up of two independent wheels, each with four patterns and an open-white position.

Superimposing the wheels enables 25 different combinations to be obtained, giving operators ample possibilities of choice.
On one of the wheels, the gobos can be rotated at adjustable speed both clockwise and counterclockwise.
A sophisticated software system allows gobo positions to be stored and constantly maintained during mirror movement (indexed).

Gobo changes can be carried out very rapidly and imperceptibly, or analog changes used to cross over slowly from one image to another. Gobo changes can also be run in sync with the music and with or without blackout.

All gobos can be easily replaced, giving operators the possibility of installing new designs easily and quickly.
As well as the gobos fitted as standard, SGM also has a wide selection of gobos available, which can be used both to sculpt light beams and project images. The complete pattern library comprises three different types of gobos: metal, dichro and glass.

Controllers

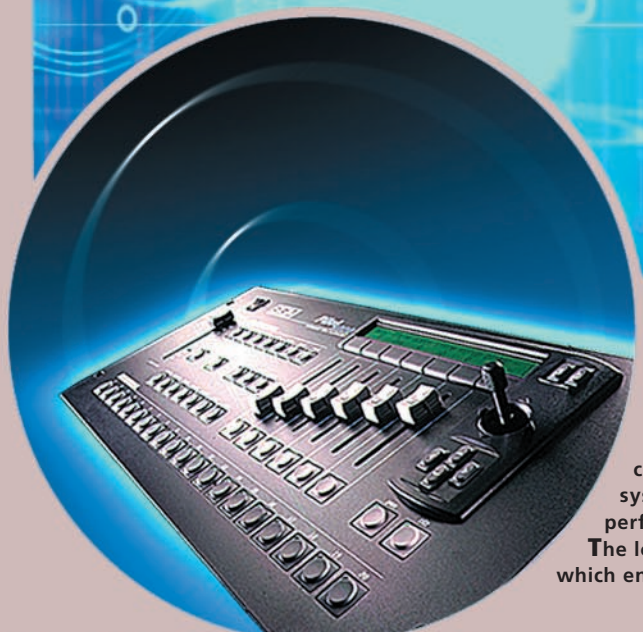
Galileo scanners' large number of functions and effects can be controlled via an SGM lighting control desk or any controller using DMX 512 or RS 232 signals.

STUDIO 24, STUDIO 12, STUDIO 24 SCAN CONTROL AND STUDIO 12 SCAN CONTROL

The Studio series of professional lighting control consoles are another of the results of the lengthy experience in manufacturing lighting controllers of SGM's Research & Development Centre, which entirely designed both mechanism and electronics, also making use of suggestions and advice from the operators using these controllers on a day to day basis, who told us exactly what their real working needs were.

They're available in 24 or 12 - channel format, controlled by means of 2 rows of faders for the manual presets and another row for the memory registers. Scan Control versions are fitted with a universal controller for DMX fixtures (moving head units, scanners, colourchangers and dimmers).

They're also equipped with an RS-232 interface for connection to a PC, a MIDI interface with In-Thru-Out ports, an input for SMPTE sync signals, an audio input, a built-in microphone and a connector for a pedal to step up and down through registers.



PILOT 2000

Everything on this unit was designed to ensure easy installation and user-friendliness, starting with the shape of its chassis, which makes it useable either in a standard 19" rack (4 units) or as a desktop unit, through to the possibility to totally customize functions and controls.

Pilot 2000 is definitely one of the most versatile controllers available on the market today and is able to control 512 channels using DMX 512 serial digital signals. Of these, 192 channels (maximum) can be set as dimmer channels.

In any case, it's possible to configure 40 intelligent units using up to a maximum of 36 channels each (the channel limit remains 512 of course). Moving head or scanner positioning is done via a twin coordinate system: absolute (using a joystick) and relative, with cursor keys, thus ensuring perfectly precise positioning.

The logic fitted uses an extremely powerful microprocessor of the latest generation, which enables control software to be rapidly updated via the RS-232 input.

SGM's wide selection of gobos

To obtain unusual effects, animating light beams or using the fixtures to create parts of a stage set, SGM offers a wide selection of gobos, which can be used both to sculpt the light beams and to project images.
Nowadays, almost any pattern can be reproduced on a gobo, from simple geometric shapes to colour designs and high definition images.

The large SGM pattern library includes metal, dichro and glass gobos.
SGM's graphic department is at clients' disposal to prepare custom designs or any others not included in our catalog. Send us your files for custom gobos to the following e-mail address: customgobos@sgm.it.

Accessories

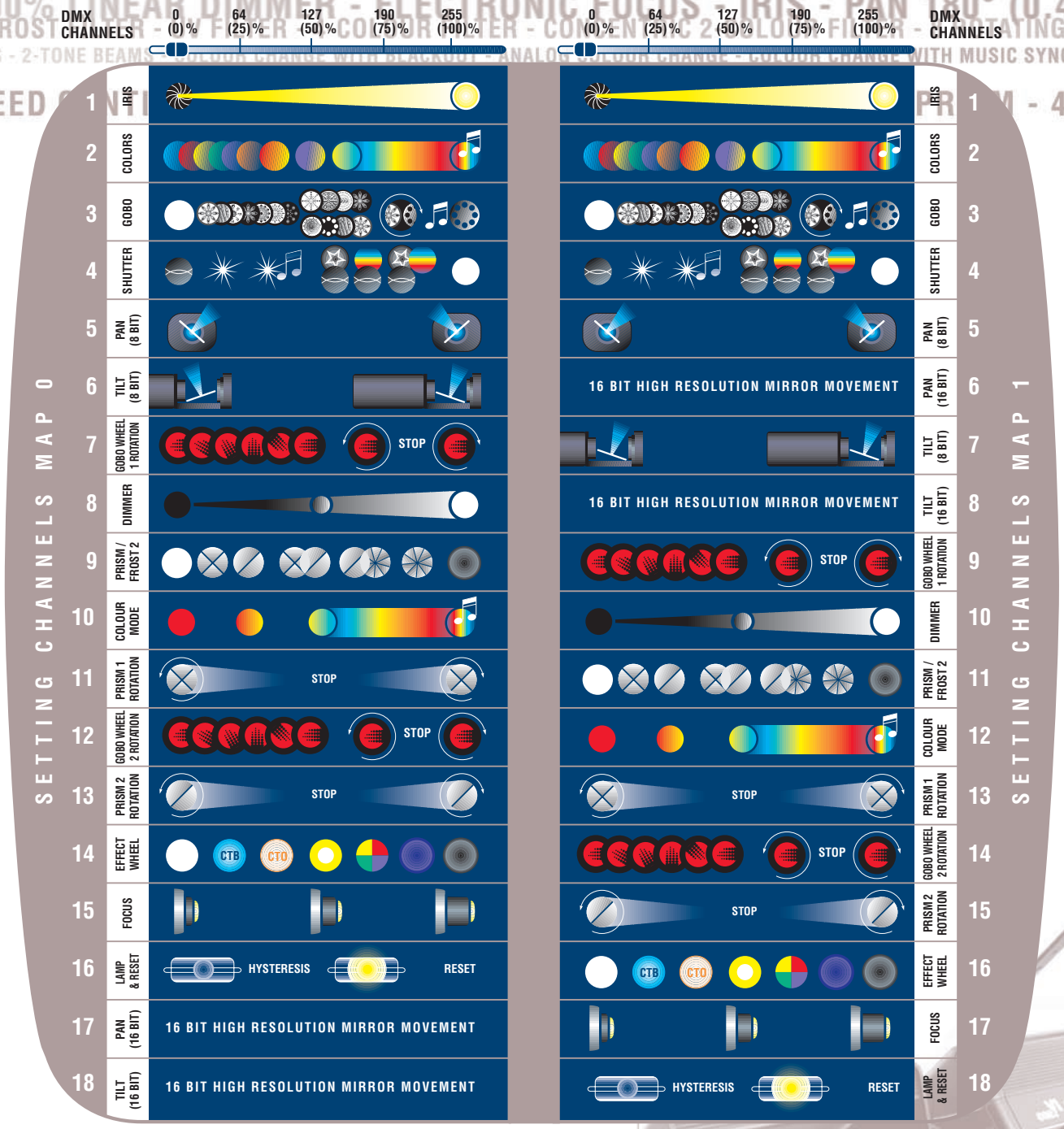
LIGHT DOME (CODE 020-2406)

This is a cover designed for application when using Galileo II 1200 and Galileo IV 1200 fixtures outdoors. The dome is in highly transparent heat-resistant polycarbonate with a built-in ventilation system and ABS body. Fixtures housed in the dome are protected against vandalism and attempted theft.
Domes are available in two standard colours: grey and blue.
On request, custom colours are also available for orders of at least 10 items.
Power requirements: 220V AC, 50/60Hz, 30W.
Dimensions: H 100 x L 80 x D 80 cm. Weight: 20 kg.

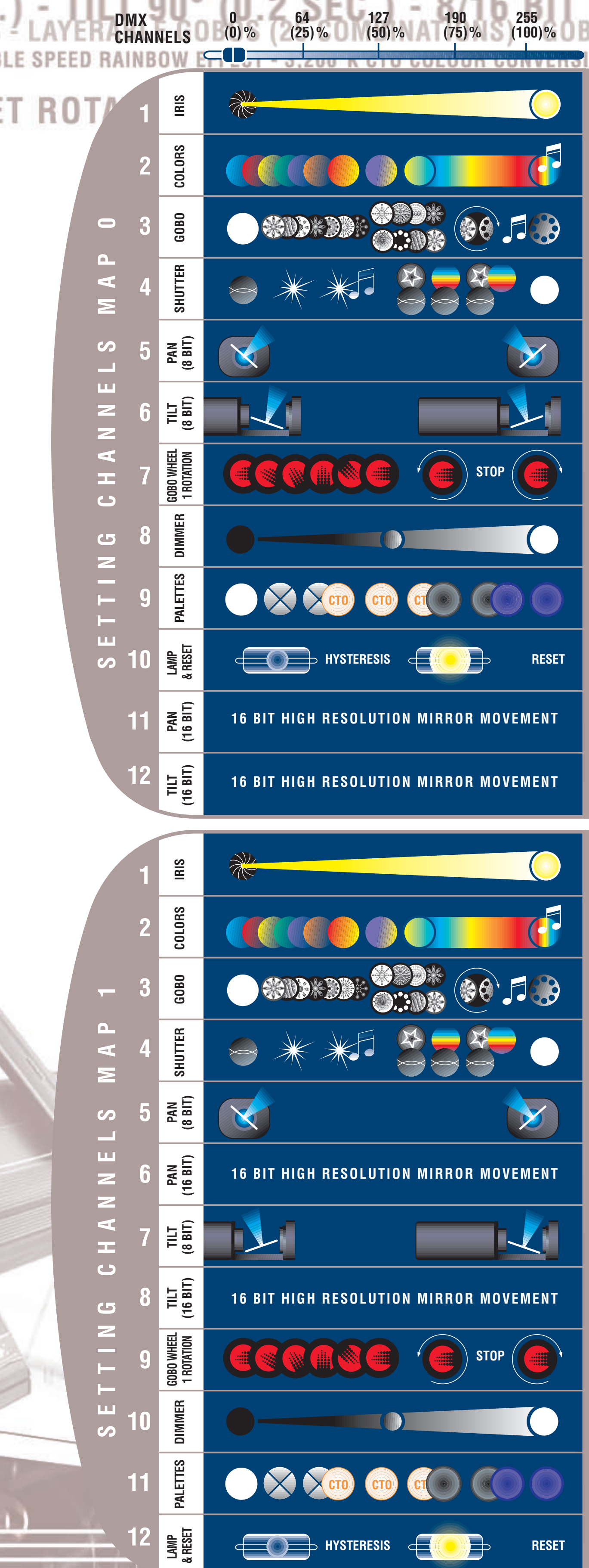
FLIGHT CASE (CODE 006-1720)

The sturdy flight cases were designed and built specially for transporting and storing Galileo scanners and ensuring total impact protection.
On request, they can also be supplied fitted with wheels mounted on skids, which can be easily removed to facilitate storage.

GALILEO IV 1200



GALILEO II 1200



SGM reserves the right to make any modifications without prior notice.

TECHNICAL SPECIFICATIONS

	GALILEO IV 1200	GALILEO II 1200
Lamp	HMI/GS 1200W discharge lamp	HMI/GS 1200W discharge lamp
Lamp life (in hours)	750	750
Colours	75	16
2-tone beams	•	•
Colour change with blackout	•	•
Analog colour change	•	•
Colour change with music sync	•	•
Variable speed rainbow effect	•	•
3,200°K CTO colour conversion filter	•	•
6,500°K CTB colour conversion filter	•	-
Soft edge frost filter	•	-
Wash frost filter	•	•
UV filter	•	•
4-colour filter	•	-
Concentric 2-colour filter	•	-
Fixed gobos	-	4
Rotating gobos	8	4
Layerable gobos	(25 combinations)	(25 combinations)
Gobo change with blackout	•	•
Gobo change with music sync	•	•
3-speed continuous gobo wheel rotation	•	•
4-facet fixed prism	-	•
9-facet fixed prism	•	-
4-facet rotating prism	•	-
Rotating eccentric prism	•	-
Shutter / Strobe 0.5-12 fps	•	•
0 -100% linear dimmer	•	•
Focus	electronic	manual
Iris	•	•
Pan	180° (0.4 sec.)	180° (0,4 sec.)
Tilt	90° (0,2 sec.)	90° (0,2 sec.)
8/16 bit resolution	•	•
Channels	16 (18 at 16 bits)	10 (12 at 16 bits)
DMX 512 – RS 232 input signal	•	•
Power supply 220/240V 50/60Hz (100/120V on request)	•	•
Thermal cut-off	•	•
Built-in microcomputer	•	•
Dimensions (HxLxD)	21 x 114,5 x 29 cm 8.3 x 45.1 x 11.4 in.	21 x 114,5 x 29 cm 8.3 x 45.1 x 11.4 in.
Weight	44 Kg - 97 lb	39,5 Kg - 87 lb