



XM 1200 Spot



The Lighting Company

XM 1200 Spot



More than just a great light, the XM 1200 Spot is the best possible investment for professionals. Because the XM 1200 Spot offers the best, in all fields. All the functions and all the reliability that service suppliers, installers and lighting designers are looking for in a modern moving head.

At a simply astonishing price, with all the advantages of costs that can be recovered in a shorter time. Plus totally renewed after-sales service, inclusive of online product assistance, technical support from a new website packed with easy-to-find information, a guarantee of two years, spare parts immediately available from local dealers and a host of other features.

The XM 1200 Spot is a new moving-head light fitted with a discharge 1200 W lamp (MSR 1200/SA), particularly suitable for use in concerts, shows, tours and special events, as well as in clubs, theatres, TV studios, permanent installations and all other applications requiring a light with high luminous output and a full set of functions.

The XM 1200 Spot incorporates motorized focussing, a 13°-31° motorized zoom with auto-focus, motorized iris, 2 gobo wheels (6 indexable 16 bit gobos + open each), CMY linear colour mixing system + colour wheel (7 colours + open), 3 rotating prisms, frost, and electronic or magnetic ballast

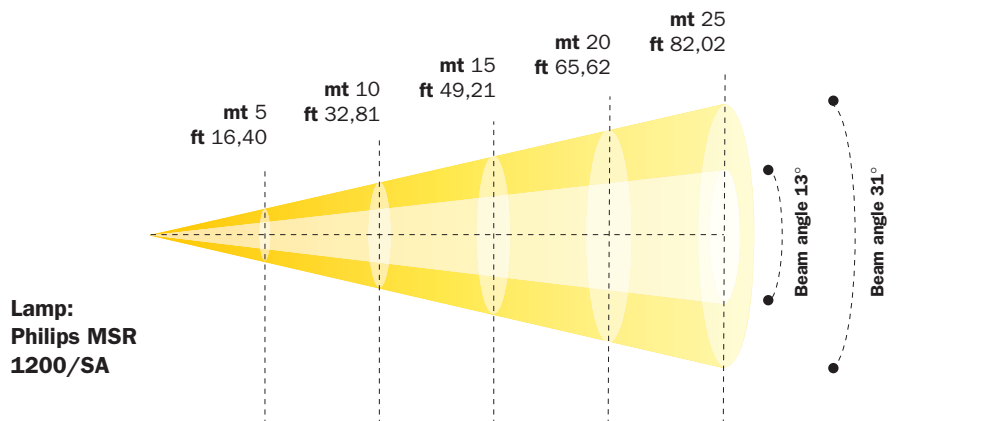
Body

The XM 1200 Spot is designed to resist all the rigours of continuous use.

The light body is made in anodized aluminium, with head and fork covering in ABS.

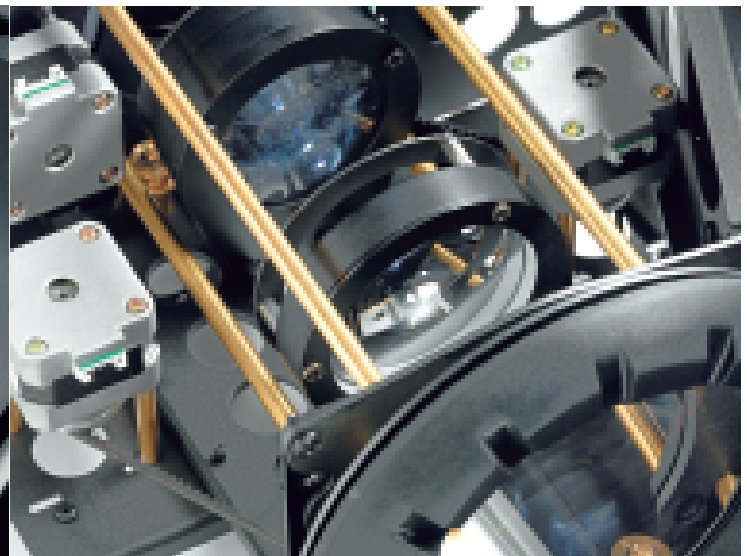
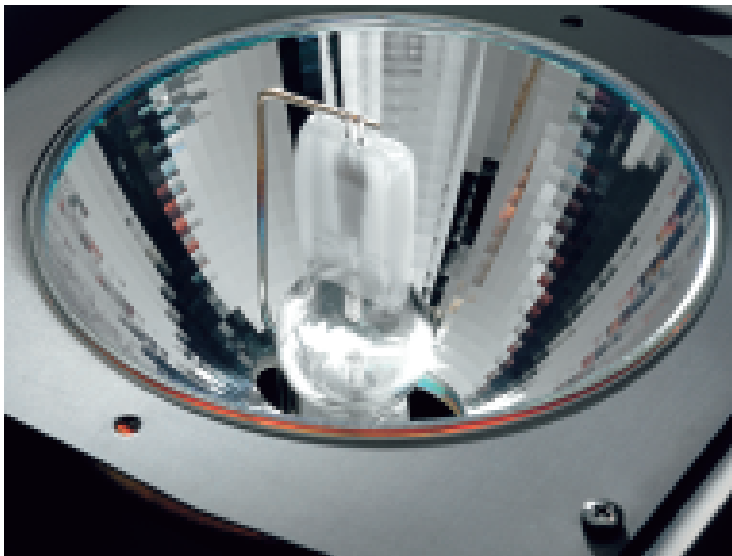
The materials used offer high resistance to mechanical stress and excellent attenuation of vibration and noise.

The protection rating against external agents is IP20.



Lux center	20.000	5.000	2.220	1.250	800	Beam angle 13°
Foot candles	1.858,74	464,68	206,32	116,17	74,35	
Diameter cm.	114	228	342	456	570	
Diameter ft.	3,74	7,48	11,22	14,96	18,70	

Lux center	3.970	990	440	250	160	Beam angle 31°
Foot candles	368,96	92,01	40,89	23,23	14,87	
Diameter cm.	350	611	917	1222	1528	
Diameter ft.	11,48	20,05	30,09	40,09	50,13	



Lamp

The XM 1200 Spot is fitted with a Philips MSR 1200/SA discharge lamp (GY22 lampholder base), with a colour temperature of 5,600 °K and a splendid luminous flux of 96,000 Lumens.

Colour rendering is greater than 80, with excellent reproduction of colours.

The lamp ensures stability of colour temperature for its entire life-span and uniform emission over the whole spectrum, combined with good operating reliability.

Duration is 750 hours, with replacement recommended before 1000 hours.

The lamp can be switched on or off by DMX, and is switched back on automatically in case of accidental switching off.

The efficient cooling system allows it to always work at the ideal temperature, thereby extending its normal lifespan, offering significant advantages for users, who in this way can avoid costly early replacement.

In addition, the XM 1200 Spot incorporates various automatic systems to protect the lamp and reduce power consumption, such as power attenuation in case of overheating, and "power saving mode" (reduction of power consumption to 650 W three seconds after shutter closure).

Other recommended lamps: Osram HTI 1200W/SE PP; GE Lighting CSR1200W SA.

Optical unit

The optical unit is composed of 4 lenses with multi-coated treatment and a cold-mirror faceted parabolic reflector with dichroic treatment and heat sink.

The combination of this optical unit with the Philips MSR 1200/SA lamp gives a uniform and intense beam of light, with a very high light efficiency (over 20,000 Lux at 5 metres).

Focus

The XM 1200 Spot features quick and precise motorized focussing that gives images great clarity and definition.

Zoom

The XM 1200 Spot contains a motorized zoom (zoom ratio 2.6:1, focal length 55-165 mm) with a notable range (from 13° of minimum beam opening to 31° maximum).

The zoom is complemented by a convenient auto-focus system that helps operators reduce programming time, avoiding continuous manual focus adjustments.



Dimmer / Shutter / Strobe

Two thin aluminium plates control the light emitted by the shutter, combining 3 functions in a single system.

Dimmer: emitted light is controlled by progressive and linear dimming.

Shutter: instantaneous shutter opening/closure.

Strobe: mechanical strobe effect (frequency variable from 0.86 flashes/sec to 6.6 flashes/sec); electronic strobe effect (frequency variable from 6.5 flashes/sec to 25 flashes/sec).

Gobos

The XM 1200 Spot contains 2 gobo wheels with 6 gobos + open on each wheel, ideal for adding lively and creative effects to light beams. The gobos rotate in both directions, and are indexable (16 bits).

Three types of gobo are installed: metal (in special steel); dichro (in dichroic glass for projecting high-definition images); glass (to reproduce unusual shapes).

Superimposition of the 2 gobo wheels and a third effects wheel allows a large number of combinations to be created.

Using the motorized focus, it is possible to project clear and sharp images or to soften their edges with creative blur effects.

Gobo changes with synchronized blackout are also possible.

The gobos can be changed rapidly and without tools, by just removing a spring to extract them and reinsert replacements in the right slot.

The gobos have an external diameter of 37 mm and an internal diameter of 30 mm, with thicknesses between 0.25 and 5 mm.



Effects

In addition to the two gobo wheels, the XM 1200 Spot has a third wheel with a series of effects that permit modifications to the light beam or changes in the images projected, greatly expanding the options available to lighting designers.

The rotating and indexable Beam shaper (0°-180°) generates elongated beams, very useful to light large areas like backgrounds, etc.

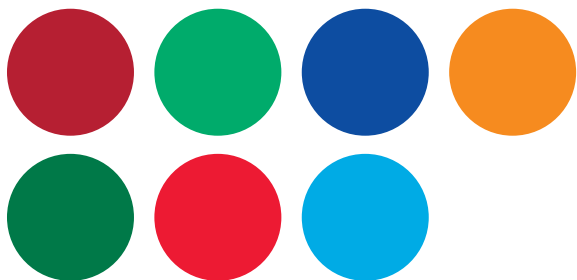
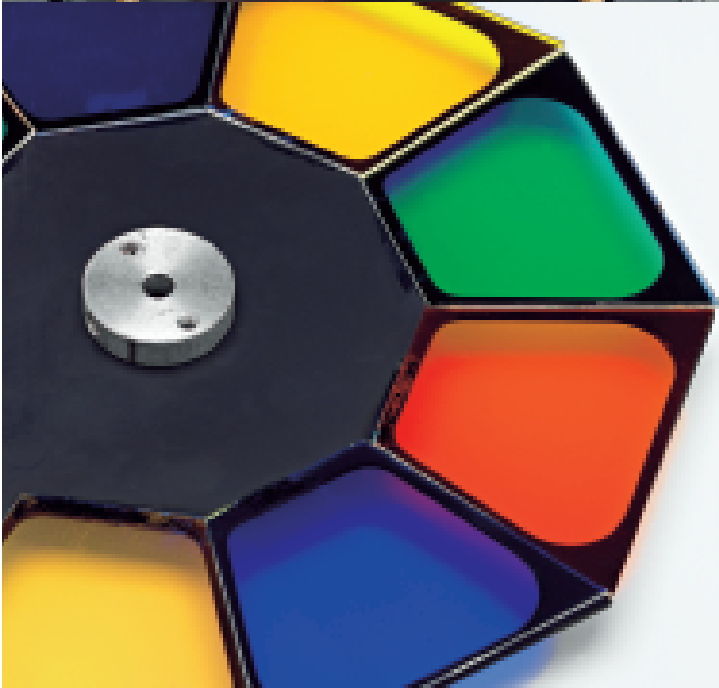
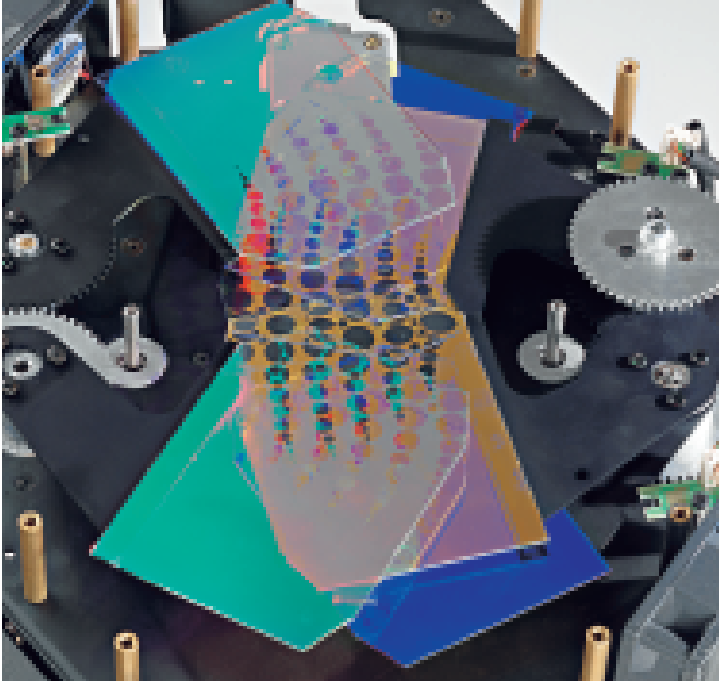
The Frost filter projects a broad and homogeneous beam with soft edges, ideal for giving uniform colour to backdrops, etc.

3 Prisms with 3, 4 and 5 facets, indexable and with variable-speed rotation in both directions, create highly sophisticated light effects.

The rotation speed and direction of prisms and gobos are independent, giving a vast variety of possible combinations.

Iris

The motorized iris, with its fast and silent movements, allows lighting designers to make linear adjustments to light beam width.



Pan / Tilt

Pan is 540° in 5.6 seconds and Tilt is 270° in 4.3 seconds. 16-bit movement resolution guarantees high-precision aim. The carefully balanced distribution of head and fork weights and the high power of the stepper motors permit instantaneous acceleration with minimal inertia times.

Repositioning of the head in the last position memorized is automatic and immediate in case of knocks.

3 different speeds are available, allowing Pan and Tilt movements to be personalized in lighting designs, but maintaining the same fluidity of movement and stopping precision.

Standard speed (preselected) is ideal for most uses.

Slow permits slow movements, suitable to light particularly sensitive and elegant moments.

Quicker movements and aiming are possible with Fast, giving greater dynamism to light designs.

Colours

The XM 1200 Spot uses a CMY colour synthesis system with 6 palettes for gradual and linear insertion, together with a colour wheel (7 colours + open).

The combination of the CMY system and the colour wheel gives lighting designers a virtually infinite range of colours, from the fullest through to pale hues, with the possibility of accurately defining nuances.

Rainbow effects and colour changes with synchronized blackout are also possible.

DMX Channels

ch 1	Pan	Pan 8 bit
ch 2	Pan FINE	Pan 16 bit
ch 3	Tilt	Tilt 8 bit
ch 4	Tilt FINE	Tilt 16 bit
ch 5	Movement speed	Pan / Tilt movement speed
ch 6	Dimmer	Mechanical dimmer
ch 7	Dimmer lamp	Electronic dimmer 60-100%
ch 8	Shutter / Strobo	"Shutter; Strobo: 0.86 - 6.6 flash/sec (mechanical); 6.5 - 25 flash/sec (electronic); colour change and gobo change with blackout sync"
ch 9	Colour wheel	7 colours, rainbow, CTO filter
ch 10	Colour mode	Colour wheel mode
ch 11	Cyan	Cyan colour linear insertion
ch 12	Magenta	Magenta colour linear insertion
ch 13	Yellow	Yellow colour linear insertion
ch 14	Colour macros	Macro functions (CMY colour combinations)
ch 15	Gobo wheel 1	6 gobos
ch 16	Gobo mode 1	Gobo mode 1
ch 17	Rotogobo 1 / Index gobo 1	Gobo 1 rotation, gobo 1 indexing
ch 18	Gobo 1 index fine	Fine indexing of gobo wheel 1 (16 bit)
ch 19	Gobo 1 shake	Gobo 1 shake speed
ch 20	Gobo wheel 2	6 gobos
ch 21	Gobo mode 2	Gobo mode 2
ch 22	Rotogobo 2 / Index gobo 2	Gobo 2 rotation, gobo 2 indexing
ch 23	Gobo 2 index fine	Fine indexing of gobo wheel 2 (16 bit)
ch 24	Gobo 2 shake	Gobo 2 shake speed
ch 25	Iris	Linear adjustment of iris
ch 26	Iris macros	Macro functions (opening / closing of iris)
ch 27	Effect wheel	3 prisms, frost, rotating shaper
ch 28	Effects rotat., effects index	Rotation / indexing of effects
ch 29	Focus	Motorized focus
ch 30	Zoom	Motorized linear zoom (13° - 31°)
ch 31	Reset / lamp	"Projector reset; lamp On / Off"



Low noise

The spotlight head contains heat sensors that maintain cooling fan speed at the minimum needed for efficient cooling. The accurate dimensioning and positioning of fans optimize airflow inside the light and contribute towards low-noise operation.

Input signals

The XM 1200 Spot can be controlled with USITT Standard DMX 512 serial digital signals or with RS 232 serial signals.

Interface / functions / software

The XM 1200 Spot can be programmed/configured according to user needs over an interface composed of a LED display and 4 buttons. The functions implemented by the internal microcomputer include projector calibration, self-testing of various components, information on operation and lamp status and other critical components, etc. This greatly simplifies setting-up operations for the projector and the planning of maintenance work. Messages shown on the display can be rotated by 180° to permit reading even with the projector inverted.

Connections

The connections include 2 XLR connectors (In and Out) with 3 and 5 poles selectable by the user, a particularly useful feature that allows any kind of DMX connector to be used.

Power supply / consumption

The XM 1200 Spot is fitted with an electronic ballast as standard, guaranteeing a stable, flicker-free light beam, long lamp life, low weight and practical use with any power supply between 190 and 245 V (50/60 Hz). Power consumption is 1300 W.

Energy saving function is automatic when the fixture is blacked out. The XM 1200 Spot is also available with a magnetic ballast, with selectable power supply (220/230/240 V). Power consumption is 1300 W.

Technical characteristics

Lamp

Lamp: Philips MSR 1200/SA
Colour temperature: 5600°K
Luminous flux: 96,000 Lumens
Colour rendering: 80
Average lamp lifespan: 750 hours
(replace before 1000 hours)
Lampholder base: GY22
Automatic switching on again of lamp in case of accidental switching off.
Lamp on/off via DMX; reset via DMX
Attenuation of lamp power in case of overheating
Power saving mode (reduction of consumption to 650 W three seconds after shutter closure).
Other recommended lamps: Osram HTI 1200W/SE PP; GE Lighting CSR1200W SA

Optical unit

4 lenses with multi-coated treatment
Cold-mirror parabolic faceted reflector with dichroic treatment
Light efficiency: > 20,000 Lux at 5 metres.

Focus

Motorized focus

Zoom

Motorized linear zoom 13° - 31° with auto-focus system
(zoom ratio 2.6:1; focal length 55-165 mm)

Dimmer / shutter / strobe

Linear dimmer

Shutter

Mechanical strobe (from 0.86 flashes/sec to 6.6 flashes/sec); electronic strobe (from 6.5 flashes/sec to 25 flashes/sec).

Colours

CMY linear colour generation (6 palettes)
Colour wheel: 7 colours + open (linear selection)
3200°K colour conversion filter
Two-colour beams
Rainbow colour
Colour change with synchronized blackout

Gobos

2 gobo wheels (personalizable): 6 rotating and indexable gobos (16 bit) each
Gobo change with synchronized blackout
Gobo dimensions: external diam. 37 mm; internal diam. 30 mm; thickness 0.25 mm - 5 mm.

Effects

Rotating and indexable beam shaper (0°-180°).
3 indexable prisms rotating in both directions (3, 4 and 5 facets)
Frost filter

Iris

Motorized iris

Pan / Tilt

Pan 540° (5.6 sec.)
Tilt 270° (4.3 sec.)
16-bit resolution
3 different speed ranges with fine control available: fast / standard / slow
Automatic Pan/Tilt repositioning in case of knocks

Internal microcomputer

Programming and configuration of spotlight with interface (LED display + 4 buttons)
Functions: calibration, self-testing, operation information, lamp status, etc.
Display "flip" (rotation through 180°)

Input signals

Input signals: DMX 512 and RS 232

DMX channels

31 DMX channels

Connections

2 XLR connectors (In and Out) with 3 and 5 poles selectable by user

Power supply

Electronic ballast:
Universal power supply 190 - 245 V (50/60 Hz)
Power consumption: 1300 W
Magnetic ballast:
Selectable power supply: 220/230/240 V (50/60 Hz)
Power consumption: 1300 W

Construction

Body: anodized aluminium; head cover: ABS

Dimensions

Dimensions (HxLxD): spotlight (870x530x410 mm); pack (1000x530x510 mm)

Weight

Weight: 44 kg (with electronic ballast), 50 kg (with packing); 54 kg (with magnetic ballast), 60 kg (with packing)

Accessories supplied

Bracket for truss installation.

Accessories

Professional flight case with wheels

CE safety standards

CE EN60598-1; CE EN60598-2-17; CE EN 55 103-1

Operating ambient temperature

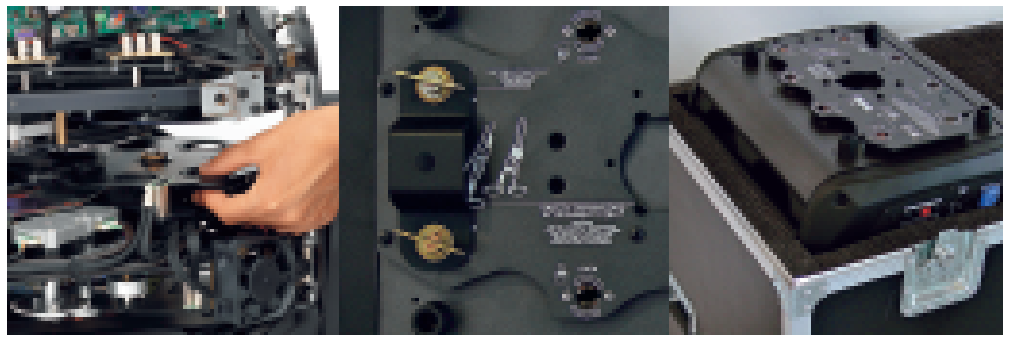
-10° / +40°

ISO 9001 certification

The DTS quality system is certified to the international ISO 9001:2000 standard.

Guarantee

The XM 1200 Spot is guaranteed for two years.



Maintenance

Maintenance of the XM 1200 Spot is very simple. No special tools are needed for the main dismantling operations, and only a normal flat-blade screwdriver and a 2 mm Allen key are required. Access to the main components (motors, wheels, etc) is very easy for technicians. The lamp can be rapidly replaced by unscrewing the three screws securing the lampholder on the rear of the light. The head cover is removed by turning 4 screws (two for each half-shell).

Installation / fixing

The XM 1200 Spot has 4 fixing points on the bottom of the light and a bracket supplied as a standard accessory, complete with rapid fast-lock closure/release (1/4 of a turn), to which aliscafi clamps, etc. can be fixed for installation on trusses. In the projector base there is an additional safety fixing point. The XM 1200 Spot must be installed at a minimum distance of 1.5 metres from the objects illuminated.

Flight case

The single professional flight case with wheels made specifically to hold the XM 1200 Spot offers effective protection in all phases of transport and storage. Made in strong plywood and coated in black scratchproof paint, the flight case is finished with aluminium edges and steel corners, and is fitted with sunken handles.

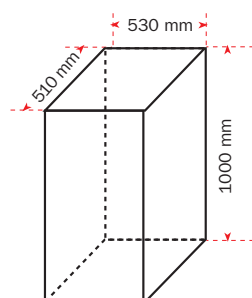
CE safety standard

The XM 1200 Spot complies with all CE EN60598-1 (Luminaires, general requirements and tests), CE EN60598-2-17 (Luminaires for stage lighting, television, film and photographic studios) and CE EN 55 103-1 (Electromagnetic compatibility) safety standards.

Thermal

The XM 1200 Spot operates correctly with an ambient temperature between -10°C and +40°C.

Designed and manufactured in Italy



The Lighting Company