



Newton 1200

*The intelligent
followspot.*





Newton 1200 intelligent followspots are based on the sophisticated, reliable and well-proven technology of SGM Galileo fixtures and designed for professional use in theatre, television studios and concerts applications, even if their user friendliness makes them suitable for any use.

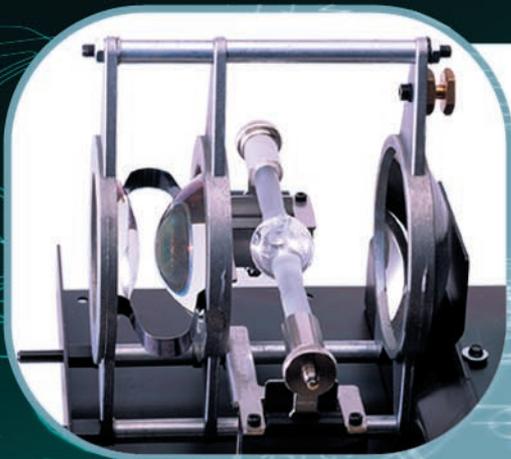
They were designed bearing in mind the quality of the work they have to carry out: for this reason, the decision was taken to place all the controls on a control panel physically separate from the fixture's body. Operators can thus position it in the most suitable point, even at a considerable distance from the spot, and whenever any adjustment is required, the vibrations transmitted to the Newton will be minimum, so no light beam shudder will be noticed.

The mechanism, optics and electronics were designed completely by SGM's research lab team, who conceived modular systems and each function therefore has its own electronic card, independent from the others. This facilitates maintenance remarkably, which considerably lowers running costs.

The spots were also built to be as manageable as possible, fitting two handles on the sides and a grip on the rear panel and thus facilitating operators' work during installation and use.

On the rear panel there's a built-in "Control" microcomputer with a display, by means of which operators have access to fixture settings and a series of information on the spot's status (fixture operating time, lamp elapsed time, etc.).



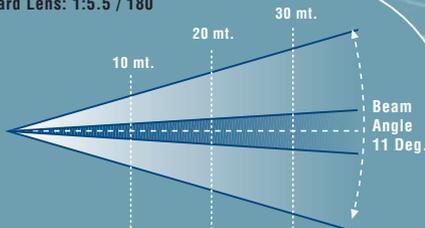


LAMP

The Newton uses a 1200W HMI metal halide lamp.

A luminous flux of no less than 110,000 lm/W, daylight color temperature of approximately 6000°K and high color rendering index (Ra>90) are just a few of the characteristics of the lamp, which ensures great color temperature stability throughout its entire lifespan (no less than 750 hours), compared with traditional models which blacken or burn out early.

Standard Lens: 1:5.5 / 180



Field size Ø (mt)			
Lens completely open:	2.65	5.4	8.2
Field size Ø (ft)			
Lens completely open:	8.69	17.71	26.90
Field size Ø (mt)			
Lens completely closed:	0.75	1.6	2.4
Field size Ø (ft)			
Lens completely closed:	2.46	5.24	7.87

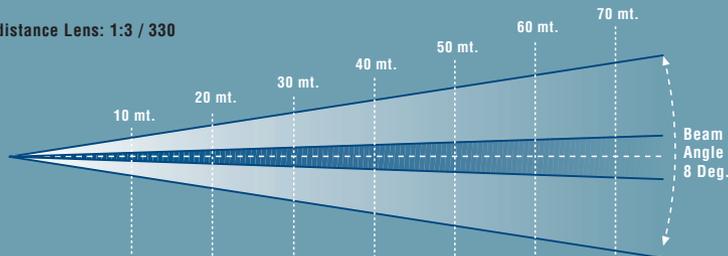
OPTICAL GROUP

Newton 1200 intelligent followspots' 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.

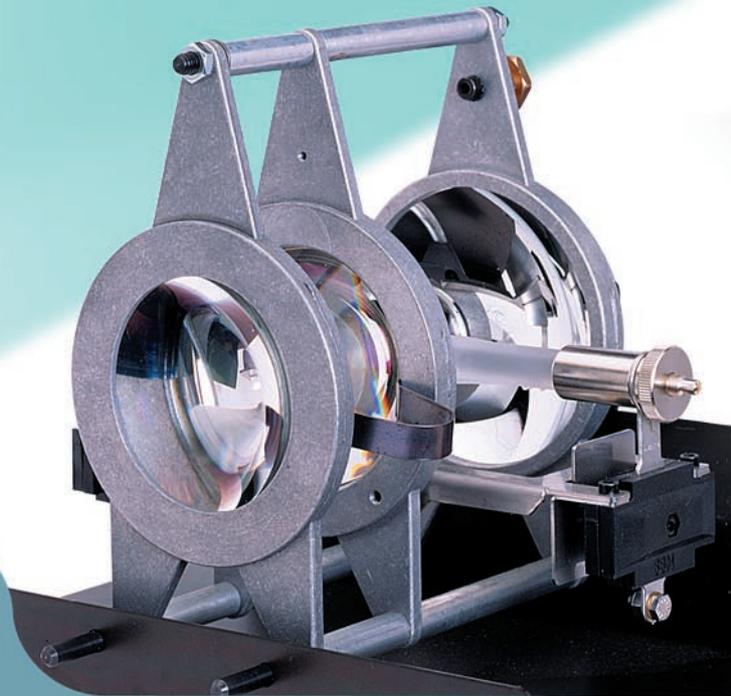
The beam is perfectly uniform and the light evenly distributed without any concentration or halos on the area being illuminated.

The top quality lenses have a high transmission coefficient and undergo special anti-reflection treatment.

Long distance Lens: 1:3 / 330



Field size Ø (mt)						
Lens completely open:	1.43	2.9	4.3	5.7	7.1	8.5
Field size Ø (ft)						
Lens completely open:	4.69	9.51	14.10	18.70	23.29	27.88
Field size Ø (mt)						
Lens completely closed:	0.18	0.32	0.44	0.56	0.68	0.8
Field size Ø (ft)						
Lens completely closed:	0.59	1.04	1.44	1.83	2.23	2.62



CODE 220-2620



CODE 220-2600

Newton 1200 intelligent followspots are fitted as standard with a 180mm (1:5.5) focal lens, which ensures very good operation on throws of up to 30 metres. Should it be necessary to work with longer throws, another 330 mm (1:3) lens is available for projecting up to 70 metres.

DIMMER

The Newton 1200 is fitted with a linear mechanical dimmer which, by moving two blades towards the centre, ensures extremely precise, continuous uniform regulation of the amount of light fed out: from true zero to 100%.

STROBE / SHUTTER

Newton 1200 followspots' very fast quiet strobe enables flash rate to be adjusted from 0.5 to 12 flashes per second. The 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 be enabled along with the dimmer, so it's possible to regulate the intensity of the strobe effects.

The Newton's shutter can be instantly closed to black out the light beam.



COLOURS

Newton 1200 followspots have a range of 7 colours, obtained from top quality dichroic filters, all of which are easily replaced to meet any custom application requirements. The dichroic filters are carefully selected in order to ensure a perfect colour match when using several spots simultaneously.

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 automatic colour changes with adjustable changeover time, or rainbow effect, i.e. continuous rotation of all the available colours at adjustable speed.

Colour changes are imperceptible to the human eye, as the changeover takes just 0.06 seconds.

IRIS

The innovative exclusive iris diaphragm is fitted with a device that ensures its opening and closing at an unbeatable speed: 0.1 sec.

The variation in beam diameter is perfectly linear and under total operator control. As well as being used to just change beam width as required, the iris diaphragm can also give eye-catching visual effects which aren't obtainable 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.



NEWTON & NEWTON CONTROL



NEWTON & REMOTE CONTROL



NEWTON CONTROL

Newton Control is a dedicated control unit for Newton 1200 intelligent followspots.

It's user-friendliness makes it suitable for any type of use, as it enables commands to be run more rapidly, more easily and more precisely than when the controls are fitted on the spot's body.

It fits directly on to the Newton Stand and enables operators to choose the position most suited to their work, but commands can also be given at a considerable distance from the fixture if necessary.

Newton Control ensures operators easy, efficient access to the Newton's functions. Each function has on/off and flash, so with a touch it's possible to pass from continuous light to strobe or instant beam blackout.

The Iris, dimmer and strobe can also be adjusted using the appropriate dedicated faders. The section dedicated to the colours offers direct access to 7 colours, two-tone beams and adjustment of the rainbow effect's speed. The Newton Control unit doesn't need a separate power supply, as it takes the necessary voltage directly from the Newton's DMX IN socket.



ACCESSORIES

FLIGHT CASE CODE 006-1722

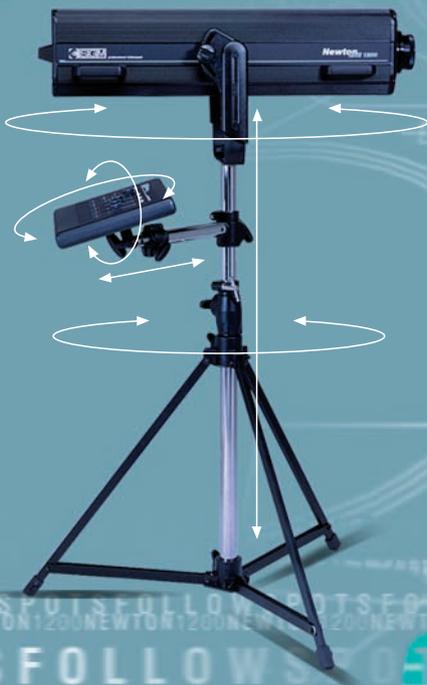
The sturdy flight case was designed and built specially for transporting and storing the Newton 1200 spots and to ensure total impact protection. On request, cases can be supplied fitted with wheels



NEWTON STAND CODE 040-2223

The Newton Stand is a professional two-section telescopic stand in die-cast aluminium and stainless steel tubing. It's supplied with a special arm on which the Newton Control is mounted and can be rotated through 360° round the stand itself.

NEWTON STAND



	DMX CHANNELS	0 (0%)	64 (25%)	127 (50%)	190 (75%)	255 (100%)
1 >	IRIS	[Slider bar from 0 to 100%]				
2 >	COLORS	[Color wheel with 7 colors]				
3 >	DIMMER	[Slider bar from 0 to 100%]				
4 >	SHUTTER STROBE	[Strobe icons: continuous, 1 flash, 2 flashes, 3 flashes, 4 flashes, 5 flashes]				
5 >	COLOR MODE	[Color mode icons: red, orange, rainbow, blue, purple]				



NEWTON 1200 - TECHNICAL SPECIFICATIONS

- › HMI 1200/G5 discharge lamp.
- › Lamp life: 750 hours.
- › 7 easily replaced standard colours.
- › Two-tone beams.
- › Adjustable speed rainbow effect.
- › Automatic colour change with adjustable crossover time.
- › High-speed colourchanger (0.06 sec.).
- › Strobe 0.5 -12 flashes per second.
- › Iris.
- › Manual focus control.
- › 0÷100% dimmer.
- › DMX512 or RS-232 input signal.
- › Built-in microcomputer with display for setting fixture functions and checking status for important information.
- › Power supply requirements: 220/240V 50/60Hz.
- › Controllable via dedicated Newton Control unit or SGM lighting control console or any other control desk with DMX 512 or RS-232 signal.
- › The Newton Control's special mounting system is built with telescopic stainless steel tubes with adjustment multi-direction rotation through 360°.
- › Elevator 1/B is a professional 2-section telescopic stand in die-cast aluminium and stainless steel tubing, in compliance with European safety norms.
- › Dimensions:
 - **Newton 1200** : (HxLxD) 21x114.5x29 cm - 8.3x45.1x11.4 in.
 - **Newton Control**: (HxLxD) 6.5x40x28.5 cm - 2.6x15.8x11.2 in.
- › Weight
 - **Newton 1200**: 23 kg - 50.7 lb.
 - **Newton Control**: 4 kg - 8.8 lb.

SGM reserves the right to change specifications without prior notice.