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INFINITY Multi Step Zoom



Professional 1200W discharge scan-light

USER'S MANUAL release 1.0

This manual must be considered an integral part of the projector.

BEFORE CONNECTING AND USING THE PROJECTOR, IT IS IMPORTANT TO READ CAREFULLY ALL THE INSTRUCTIONS IN THIS MANUAL.

QUALIFIED PERSONNEL ONLY, IN COMPLIANCE WITH ALL THE SECURITY LAWS, CAN DO THE INSTALLATION, THE MAINTENANCE AND THE UTILISATION OF THIS PROJECTOR.

BEFORE CONNECTING THE PROJECTOR, MAKE SURE THAT THE FREQUENCY AND THE VOLTAGE VALUES ARE SUITABLE AS SPECIFIED ON THE PROJECTOR.

FOR ANY DOUBT, CONTACT YOUR SUPPLIER OR SEND AN E-MAIL TO:

tech@lamposrl.it

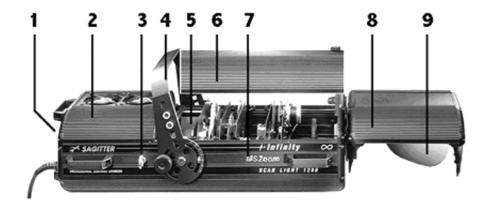


INDEX

GENERAL DESCRIPTION	page 2
	page 3
START-UP PROCEDURES	
DMX CHANNEL ASSIGNMENT	page 8
OPTICAL SYSTEM	page 12
MAINTENANCE	page 13
TROUBLESHOOTING	page 15
SPARE PARTS	page 16
WARRANTY	page 16

GENERAL DESCRIPTION

As shown in Figure, the INFINITY MULTI STEP ZOOM 1200 is made up of the following parts:



- 1. Rear panel
- 2. Cooling unit
- 3. Auxiliary support
- 4. Anchoring bracket
- 5. Lamp compartment
- 6. Lid
- 7. Projector body
- 8. Swivelling head
- 9. Rotating mirror

Technical Features and Dimensions

Voltage rating 230 V
Rated current 7,5 A
Induced current 3,5 A
Absorbed power 1600 W
Frequency 50 Hz
Maximum room temperature 35° C

Maximum room temperature 35° C

Maximum surface temperature 70° C

Distance from inflammable surfaces 1,5 mt

Main assembling via #1 screw M 12

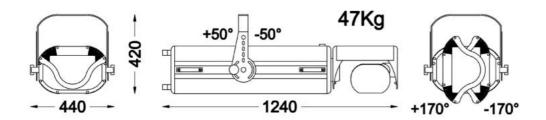
Auxiliary device mount via #1 screw M 12

Length 1240 mm

Width including bracket and handle 440 mm

Weight 47 Kg

Weight 47 Kg Weight, including packaging 54 Kg



CAUTION

(60 Hz optional setting)

The projector cannot be mounted on inflammable surfaces.

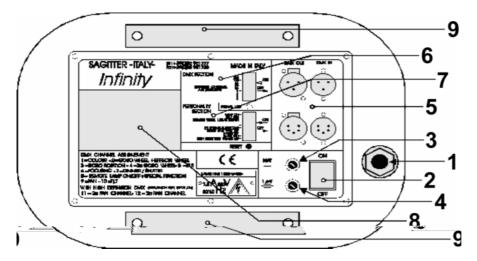
Norms applied to construction:

EN 60 598-1 EN 60 598-2-17 EN 294 EN 50 082-1 EN 65 015 EN 60 555-2 EN 61 000-3-2

DESCRIPTION OF MOVING PARTS AND CONTROLS

Rear Panel

As shown below, the following elements can be seen on the rear panel:



- 1. Cable clamp, (cable 1m)
- 2. ON/OFF switch
- 3. Line fuse
- 4. Electronic fuse
- 5. CANNON socket and jack area
- 6. DMX address area
- 7. Personality functions area
- 8. Serial number plate
- 9. Rear handles

Adjustment of Projector Body Angle

As shown in Figure, the INFINITY MSZ 1200 projector can be adjusted between 0 ÷ 50° compared to its anchoring bracket.

- Loosen lateral knobs.
- Place the projector at the desired angle.
- Firmly tighten lateral knobs.
- Make sure the projector is correctly mounted at the new angle.

Working Position

INFINITY MULTI STEP ZOOM 1200 can work in all positions within ± 90° of the horizontal axis.

Admissible Environmental Conditions

The projector was engineered and produced to function in covered, dry areas with an air temperature ranging between 5° and 35° C, and with a humidity level between 30 and 90%. Sharp changes in room temperature may generate condensation inside the projector, which can harm the projector. Therefore, switch on the projector only after it has undergone a period of gradual adaptation to the room temperature.

Mechanical Safety Guards

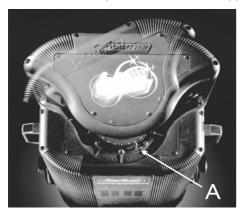
A bipolar cut-off switch is located between the lamp compartment and the cooling unit. This safety switch cuts off the power to the projector if the top lid is opened.

Noise Level

After the projector has been powered up and the initial configuration takes place, the noise produced by the projector is primarily due to its cooling system. The noise level is much lower than the limit of 70 dB permitted by law.

Adjustment of Mirror Support Angle

As shown in the picture, the mirror support can rotate on a 340° angle (+170° / -170°).



Loosen knob "A". Rotate the projector head to the desired angle. Firmly tighten knob "A".

Modular construction

As shown in the picture, the INFINITY has a modular construction for ease maintenance.



HANDLE WITH CARE!!!

Loosen the knobs of the top lid and remove it. Loosen the lateral screws of module to remove it. The modules have easy and direct connection system.

Packing

The projector is shipped and delivered in a cardboard box made of KRAFT cardboard and semi-chemical additive-free paper, in compliance with BSFV Class 3 standards for waste disposal. The projector is completely assembled, placed in the box inside a polyethylene bag and held firmly in place with polyurethane foam packing material. The box is stapled shut. Even though the packing provides complete protection from rain, it must not be exposed to inclement weather or humidity.

No more than three identical boxes can be stacked one on top of the other. Keep the original packing for possible shipments in the future.

Storage

The projector, in its original packing, must be kept in covered, dry areas with a temperature between -10° C and +50° C.

Handling

The projector, with or without packing, must be handled with care. Lifting and handling must be carried out with special equipment. Do not expose the projector, with or without its packing, to brusque accelerated or decelerated movements, knocks, dragging, or other stress caused by unsuitable handling methods.

The projector in its packing can be seriously damaged if it falls or suffers a blow during transportation.

START-UP PROCEDURES

Positioning and Installation

Follow these steps for opening the package and installing the projector on its working position:

- · Place the projector near the place it will be installed.
- · Open the package and remove anchoring elements and accessories.
- · Carefully read the instructions in the manual.
- · Prepare suitable hooks for the anchoring brackets and auxiliary support.
- · Using suitable lifting equipment, place the projector up against the hooks.
- · Tighten the M12 bolts and insert a device to prevent them from accidentally loosening.
- · Attach the auxiliary support element and make sure it is tightly fastened.
- · Make sure all adjustable parts are locked firmly in place in the desired position.

CAUTION

You must verify the stability of the anchoring elements when the projector is in working condition. In compliance with the laws in force, the anchoring support must withstand a load of 470 kg. Screws, hooks, and hardware must be inserted correctly and installed to prevent them from accidentally loosening.

IMPORTANT

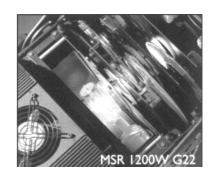
The projector was designed to function when attached to the bracket. The projector cannot function sitting upon a flat surface that obstructs the rear cooling vents. Do not install the projector where there are objects located at a distance of less than 20 centimetres from the cooling system.

Lamp installation

- Loosen the knobs on the top lid and remove it.
- Remove the lamp from the packing and carefully read the manufacturer's instructions.
- LAMP MSR/HSR 1200W or MSD/HSD 1200W: Insert the lamp into the ceramic socket (G22).
- LAMP HMI/MSI 1200W: Loosen the two ring nuts at both end of the lamp (socket SFc15-5).

Place the lamp in its socket. Make sure the protuberance of the central bulb is facing downwards to avoid creating shadows in the projection. Tighten the two ring nuts on the lamp.

- Replace the top lid and firmly tight the knobs.
- Regulate the LAMP, with screws, if necessary.





CAUTION

During lamp installation and substitution, the operator must take care to avoid any contact between the lamp bulb and the condenser lens. (The condenser lens is a special tempered glass, very resistant to the high temperature but very fragile in case of contact with quartz glass)

Power Supply

INFINITY 1200 absorbs 1600W at 230V. Makes sure the projector does not pull the cable in all different working positions.

Connect the fixture to the mains with the enclosed power cord. See the table for the colours of the connection-cable.

PIN	SYMBOL	EC	US	UK
phase	L	brown	yellow/c	red
neutral	N	blue	silver	black
earth	4	yellow/green	green	green

When in doubt, consult a qualified electrician.

Be careful with your operations. With a high voltage you can suffer a dangerous electric shock when touching the wires! Inside the projector, the ignitor circuit have very high voltage, over 5Kv.

The User must ensure that the power supply is provided with a highly sensitive differential circuit breaker 30m/A to protect the projector from indirect contacts, and that the grounding system PE is working properly.

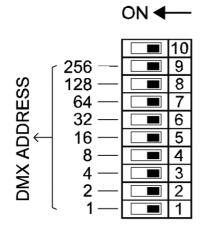
Do not power the projector with a dimmer circuit

Control Unit

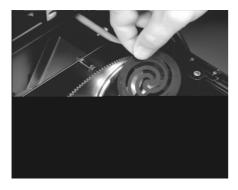
INFINITY MSZ 1200 can be controlled practically by all types of controllers on the market that can execute the standard DMX 512 protocol. Controller-projector and projector-projector connections require a two-core screened cable provided with CANNON XLR 3 pin and 5 pin, plugs and sockets. The ground braid on the screened cable must be connected to just one end of the cable. The projector and cables must not be installed near overhead ducts for electrical cables or intense magnetic fields.

Projector Address

To make sure the projector functions properly, the dip-switches in the DMX ADDRESS AREA, on the rear panel, must be correctly configured. Keep in mind that each INFINITY MSZ 1200 occupies a minimum of 12 to a maximum of 14 DMX channels (12 channels when it operates in the Standard Operating Mode, 14 when the PERSONALITY dip-switch 01 is set to ON, enabling the HIGH DEFINITION 16bit function). Each projector must be set separately on its own BASE CHANNEL (DMX starting address). The DMX starting address assignment is obtained by summing the values for each switch in the DMX SECTION (for example, to set a projector on BASE CHANNEL 39, you must set dip-switches 32, 4, 2, and 1 to the ON position, because 32+4+2+1=39). In the Standard Operating Mode, this means the INFINITY MSZ 1200 will receive signals on 12 channels following the DMX starting address, included (for example, if the projector is set on DMX=39, it will receive signals on channels 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49 and 50).



Gobos replacement



As shown in the figure, it is very easy to replace gobos on the wheel. When the projector is cold, follow these steps:

- -Disconnect the power supply.
- -Wait at least 20 minutes to be sure the projector components are cold.
- -Loosen the knobs on the top lid and remove it.
- -Choose the pattern you want to replace and delicately press on it to extract it from a fastening clip.
- -Remove the gobo when it has been released.



- -Choose another gobo from the special compartment inside the projector (see figure) or use standard M-size metal gobos.
- -Insert the new pattern inside the two clips and press lightly to click it into place beneath the third clip.
- -Replace the top lid and firmly tighten the knobs

The same operation can be performed on all rotating gobos and on three of the six fixed ones.

If you want to use other metal gobos:

Metal gobos: M size Diameter: 66mm Image diameter: 48mm

If you want to use glass or dichro gobos:

If you want to use a dichro gobos or glass gobos, using D size gobos (Diameter 53.3mm) and order the DG09520 Sagitter metal gobo ring. Use silicon to fix the dichro gobo on metal gobo ring.

DMX CHANNELS ASSIGNMENT

Ch FUNCTION

- 1 COLOUR
- 2 1° GOBOS WHEEL (ROTATING)
- 3 2° GOBOS WHEEL
- 4 GOBO INDEX + ROTATION
- 5 EFFECTS WHEEL
- 6 IRIS
- 7 MULTI STEP ZOOM + FOCUS
- 8 DIMMER
- 9 SHUTTER
- 10 LAMP ON/OFF + SPECIAL FUNCTIONS
- 11 PAN (coarse)
- 12 TILT (coarse)
- 13 2° PAN (fine) (when 16 bit HIGH DEFINITION
- 14 2° TILT (fine) SCANNING option is enabled)

Note: Is also available the following 16 bit option

- 11 PAN (coarse)
- 12 PAN (fine)
- 13 TILT (coarse)
- 14 TILT (fine)

To enable this function you must set in position ON the last three personality dip-switches (invert pan, invert tilt, high definition scanning)

CHANNEL 1 = COLOUR

percent value	s	decimal values	
0 > 5.9 %	WHITE	0 > 15	
6.3 > 9.4 %	WHITE / RED	16 > 24	
9.8 > 13.3 %	RED	25 > 34	
13.7 > 18 %	RED / YELLOW	35 > 46	
18.4 > 21.6 %	YELLOW	47 > 55	
22 > 25.5 %	YELLOW / MAGENTA	56 > 65	
25.9 > 29.8 %	MAGENTA	66 > 76	
30.2 > 33.7 %	MAGENTA / GREEN	77 > 86	
34.1 > 37.3 %	GREEN	87 > 95	
37.6 > 41.6 %	GREEN / ORANGE	96 > 106	
42 > 45.9 %	ORANGE	107 > 117	ON ←
46.3 > 49.8 %	ORANGE / BLUE	118 > 127	
50.2 > 53.3 %	BLUE	128 > 136	LAMP ON — 10
53.7 > 57.3 %	BLUE / DARK BLUE	137 > 146	SELF TEST — 9 FREE COLOUR WHEEL — 8
57.6 > 61.6 %	DARK BLUE	147 > 157	GOBOS WITH SHUTTER — 7
62 > 65.1 %	DARK BLUE / WHITE	158 > 166	IRIS PULSE AND INVERT — 6
65.5 %	GREEN	=167	INVERT DIMMER — 5
65.9 %	MAX FORWARDING SPIN	=168	INVERT SHUTTER — 4 INVERT PAN — 3
80 %	MIN FORWARDING SPIN	=204	INVERT FAN — 3
80.4 > 83.9 %	STOP	205 > 214	HIGH DEFINATION 16bit — 1
84.3 %	MIN REVERSE SPIN	=215	
100%	MAX REVERSE SPIN	=255	

⁻ OPTION: PERSONALITY **DIP-SWITCH N° 08** in position ON, give access to the PROPORTIONAL control of the colour wheel, see the different colours sequence:

GREEN - GREEN/MAGENTA - MAGENTA - MAGENTA/YELLOW - YELLOW - YELLOW/RED - RED - RED/WHITE - WHITE - WHITE/DARK BLUE - DARK BLUE - DARK BLUE/BLUE - BLUE - BLUE/ORANGE - ORANGE - ORANGE/GREEN - GREEN

Note: Unchanged function from 168 to 255 (65.9% to 100%)

CHANNEL 2 = GOBO WHEEL

percent values		decimal values
0 > 20 %	GOBO 1 (OPEN)	0 > 51
20.4 > 40 %	GOBO 2	52 > 102
40.4 > 60 %	GOBO 3	103 > 153
60.4 > 80 %	GOBO 4	154 > 204
80.4 >100 %	GOBO 5	205 > 255

CHANNEL 3 = 2° GOBO WHEEL

percent values	decimal values	
0 > 9.4 %	GOBO 1 (OPEN)	0 > 24
9.8 > 13.7 %	NEGATIVE ADJ. GOBO 2	25 > 35
14.1 %	GOBO 2	36
14.5 > 18.4 %	POSITIVE ADJ. GOBO 2	37 > 47
18.8 > 23.1 %	NEGATIVE ADJ. GOBO 3	48 > 59
23.5 %	GOBO 3 DICHRO SECTORS	60
23.9 > 28.6 %	POSITIVE ADJ. GOBO 3	61 > 73
29 > 33.7 %	NEGATIVE ADJ. GOBO	74 > 86
34.1 %	GOBO 4	87
34.5 > 38.8 %	POSITIVE ADJ. GOBO 4	88 > 99
39.2 > 43.5 %	NEGATIVE ADJ. GOBO 5	100 > 111
43.9 %	GOBO 5 TUNNEL	=112
44.3 > 48.6 %	POSITIVE ADJ. GOBO 5	113 > 124
49.0 > 52.9 %	NEGATIVE ADJ. GOBO 6	125 > 135
53.3 %	GOBO 6	=136
53.7 > 61.6 %	POSITIVE ADJ. GOBO 6	137 > 157
62.0 %	MAX FORWARD SPIN	=158
79.2 %	MIN FORWARD SPIN	=202
79.6 > 82.7 %	STOP	203 > 211
83.1 %	MIN REVERSE SPIN	=212
100 %	MAX REVERSE SPIN	=255

CHANNEL 4 = GOBO 1° WHEEL (INDEX and ROTATION)

percent value	decimal values	
0 > 60.4 %	INDEXED POSITION	0 > 154
control of the i	ndexed position of the pattern on	
540° (1 and 1/	2 revolution of the pattern)	
60.8 %	MAX FORWARD SPIN	=155
77.6 %	MIN FORWARD SPIN	=198
78 > 82.7 %	STOP	199 > 211
83.1 %	MIN REVERSE SPIN	=212
100 %	MAX REVERSE SPIN	=255

CHANNEL 5 = EFFECTS WHEEL

percent value	decimal values	
0 > 20 %	OPEN	0 > 51
20.4 > 40 %	COLOUR TEMP. 3200°K	52 > 102
40.4 > 60 %	COLOUR TEMP. 6000°K	103 > 153
60.4 > 80 %	4 MULTIFACED PRISM	154 > 204
80.4 >100 %	FROST FILTER	205 > 255

CHANNEL 6 = IRIS

ON	4	
OIN	•	

percent value	s	decimal values	LAMP ON — 10
0 %	CLOSED	=0	SELF TEST — 9 FREE COLOUR WHEEL — 8
0 % > 100 %	INCREASING DIAMETER	0 > 255	GOBOS WITH SHUTTER — 7
100 %	OPEN	=255	IRIS PULSE AND INVERT — 6
			INVERT DIMMER — 5
- OPTION: PE	RSONALITY DIP-SWITCH N° 06	in position ON	INVERT SHUTTER — 4
0 %	OPEN	=0	INVERT PAN — 3 INVERT TILT — 2
0 % > 49.0%	DECREASING DIAMETER	0 > 125	HIGH DEFINATION 16bit — 1
49.4 > 52.2 %		126 > 133	
52.5 %	MIN SPEED PULSE EFFECT	134	
93.7 %	MAX SPEED PULSE EFFECT	239	
94.1 > 100 %	CLOSED	240 > 255	

CHANNEL 7 = MULTI STEP ZOOM + FOCUSING

percent values		decimal values	
0 %	10°	CLOSE FOCUS	=0
0 > 24.7 %	10°	ADJUSTABLE FOCUS	0 > 63
24.7	10°	FOCUS TO INFINITE	=63
25.1 %	12°	CLOSE FOCUS	=64
25.1 > 49.8 %	12°	ADJUSTABLE FOCUS	64 > 127
49.8 %	12°	FOCUS TO INFINITE	=127
50.2 %	14°	CLOSE FOCUS	=128
50.2 > 75.3 %	14°	ADJUSTABLE FOCUS	128 > 192
75.3 %	14°	FOCUS TO INFINITE	=192
75.7 %	16°	CLOSE FOCUS	=193
75.7 > 100 %	16°	ADJUSTABLE FOCUS	193 > 255
100 %	16°	FOCUS TO INFINITE	=255

CHANNEL 8 = DIMMER

percent value 0 % 0 % > 100 % 100 %	BLACK-OUT INCREASING DIMMER LEVEL OPEN	decimal values =0 0 > 255 =255
- OPTION: PE	RSONALITY DIP-SWITCH N° 05 in	position ON
0 %	OPEN	=0
0 % > 100 %	DECREASING DIMMER LEVEL	0 > 255
100 %	BLACK-OUT	=255

CHANNEL 9 = SHUTTER

percent values	decimal values	
0 > 9.8 %	CLOSED	0 > 25
10.2 > 20.8 %	OPEN	26 > 53
21.2 %	STROBE EFFECT MIN SPEED	=54
100 %	STROBE EFFECT MAX SPEED	=255
- OPTION: PER	RSONALITY DIP-SWITCH N° 04 in	position ON
0 > 9.8 %	OPEN	0 > 25
11.2 > 20.8 %	CLOSED	26 > 53
21.2 %	STROBE EFFECT MIN SPEED	=54
100 %	STROBE EFFECT MAX SPEED	=255

CHANNEL 10 = SPECIAL FUNCTIONS

percent values	decimal values	
0 > 29.4 %	LAMP OFF (AFTER 15 SEC.)	0 > 75
44.7 > 54.9 %	RESET (AFTER 5 SEC.)	114 > 140
71 > 100 %	LAMP ON	181 > 255

- OPTION: PERSONALITY **DIP-SWITCH n°10** in position ON enable permanent lamp on

44.7 > 54.9 % RESET AFTER 5 SEC. 114 > 140

NOTE: LAMP ON and LAMP OFF WILL BE ENABLED WHEN POSSIBLE (example no function: hot lamp or exhausted lamp)

CHANNEL 11 = PAN

LAMP ON SELF TEST 9 percent values decimal values FREE COLOUR WHEEL 8 0 % **LEFT** =0**GOBOS WITH SHUTTER** 7 100 % **RIGHT** =255IRIS PULSE AND INVERT 6 INVERT DIMMER INVERT SHUTTER 4 - OPTION: PERSONALITY **DIP-SWITCH N° 03** in position ON **INVERT PAN** 3 **RIGHT** 0 % INVERT TILT **2** 100 % **LEFT** =255 **HIGH DEFINATION 16bit**

ON **←**

(16 bit HIGH DEFINITION DMX with dip-switch n° 01 in position ON)

CHANNEL 12 = TILT

percent values
0 %
UP
decimal values
=0

0 % UP =0 100 % DOWN =255

- OPTION: PERSONALITY DIP-SWITCH N° 02 in position ON

0 % DOWN =0 100 % UP =255

(16 bit HIGH DEFINITION DMX with dip-switch n° 01 in position ON)

16 bit HIGH DEFINITION SCANNING

OPTION 1: WITH PERSONALITY SWITCH n°1 IN POSITION ON

CHANNEL 11 = PAN (Corse) CHANNEL 12 = TILT (Corse)

CHANNEL 13 = 2° PAN CHANNEL (Fine) CHANNEL 14 = 2° TILT CHANNEL (Fine)

OPTION 2: WITH PERSONALITY SWITCH n°1. n°2 AND n°3 IN POSITION ON

CHANNEL 11 = PAN (Corse)

CHANNEL 12 = 2° PAN CHANNEL (Fine)

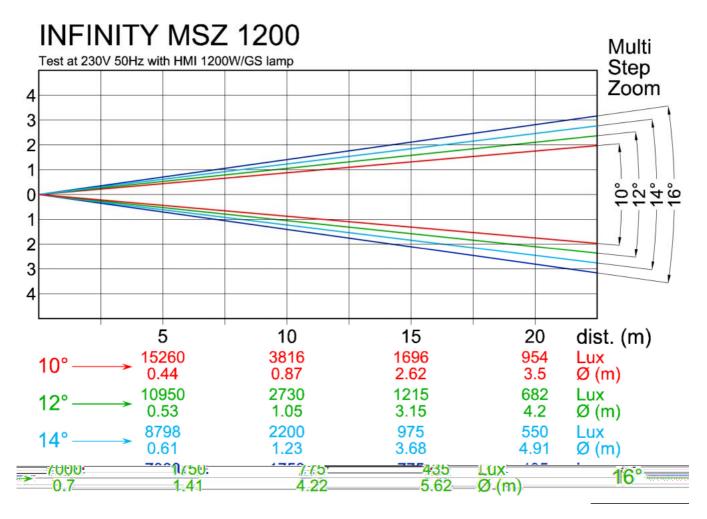
CHANNEL 13 = TILT (Coarse)

CHANNEL 14 = 2° TILT CHANNEL (Fine)

OPTICAL SYSTEM

The INFINITY MULTI STEP ZOOM 1200 is provided with a high-efficiency optical system made of double-coated antiflare lenses. This system lets INFINITY MULTI STEP ZOOM 1200 project an extremely powerful and homogenous light beam. The MULTI STEP ZOOM allows the operator to perform different angles of the projection beams (10°, 12°, 14° and 16°) while the focusing system, remotely controllable, provide the compensation of the optical system length.

The graphs below show the beam amplitudes for the different choices.



LUX centre beam + or - 5%

In the graph the regulation of the lamp is optimal.

MAINTENANCE

CAUTION

Safety guards, lenses, and filters must be replaced if they are visibly damaged to the point that they become ineffective (for example, if they have deep slashes or cuts).

The lamp must be replaced if damaged, cracked, or deformed by the heat.

PLANNED MAINTENANCE at user's charge and responsibility

OPERATION	FREQUENCY	ACTION
Lamp replacement	750 hours	M1
Optical efficiency test	750 hours	M2
Surface temperature test	Quarterly	M3
Cleaning	Two months	M4
Testing of safety breaker circuit on general electric system	Monthly	Check life-saving safety device pressing "T" button
Check damage to cables due to mobile use of projector	Once a year	Replace cables if damaged

NOTE: To ensure the correct functioning of the unit, a general service check of the projector must be made, twice a year, from an authorized technician

ATTENTION

Always use original spare parts to ensure safe and proper functioning of the projector.

Do not make changes to the projector. A modified projector requires a new CE marking.

M1 - LAMP REPLACEMENT

The lamp must be replaced with the same type of lamp and according to the same frequency. A less efficient lamp jeopardizes projector performance. Replace the lamp as follows:

- When the projector is cold, turn off the ON/OFF switch to cut the electricity and open the top lid to access the lamp compartment.
- Remove the lamp from the lamp holder.
- Remove the new lamp from its packing and carefully read the Manufacturer's instructions.
- A. LAMP MSR 1200W G22: Insert in the lamp into the socket.
- B. LAMP HMI 1200W/GS: Loosen the two ring nuts at both ends of the lamp. Place the lamp in its socket inside the projector. Make sure the protuberance of the central bulb is facing downwards to avoid creating shadows in the projection. Tighten the two ring nuts on the lamp.
- Replace the top lid and firmly tighten the knobs.
- Switch on the projector to make sure the lamp is working correctly.

ATTENTION

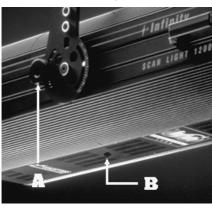
During lamp installation and lamp substitution, the operator must take care to avoid any contact between the lamp bulb and the condenser lens. (The condenser lens is a special tempered glass, very resistant to the high temperature but very fragile in case of contact with quartz glass).

M2 - OPTICAL EFFICIENCY TEST

Use the controller to focus the beam on a flat surface, keeping the Iris and Dimmer at 100%. If the spot is not homogeneous, follow these steps:

- Remove knob A, making sure the projector keeps its current position.
- Insert a screw driver in the hold and turn clockwise or counter clockwise to optimise the horizontal position of the lamp compared to the optical system.
- Replace the knob B and firmly tighten.
- Remove the PVC plug on the bottom of the projector.
- Insert a screw driver in the hole and turn it clockwise or counter clockwise to optimise the vertical position of the lamp compared to the optical system.

Replace the PVC plug.



M3 - SURFACE TEMPERATURE TEST

Before you check the temperature, make sure the projector is in the full operating mode (wait about 20 minutes after switching on the projector). Use a contact probe to measure the surface temperature on the projector's metal case and determine the hottest area (Top lid near to the lamp). The temperature must be less than 60°. Otherwise, check the cooling system.

M4 - CLEANING

ATTENTION

Cleaning must be carried out when the projector is cool, disconnected from the power supply, with the general power switch turned off, and the ON/OFF switch on the rear panel switched OFF.

Frequency

It is recommended to clean the projector every two months to ensure efficiency and performances. If the projector is used in particularly smoky or dusty areas, clean the projector more frequently.

- 1. Open the top lid by unscrewing the knob and removing it from its seat.
- 2. Use a vacuum cleaner to remove dust.
- 3. Use a soft cloth (non-fabric) and pH neutral (pH7) liquid detergent to clean mirror and lens surfaces. Make sure you remove all residual traces. Never touch the lamp directly with your hands or materials that can leave greasy traces.
- 4. Follow the same steps to clean the other internal parts of the projector.
- 5. Make sure the cleaning procedure did not damage any internal part or modified their correct position.
- 6. Make sure no cleaning materials or tools remain inside the projector.
- 7. Replace the top lid and firmly tighten the knob.

Life span and disposal

If the projector is operated in ordinary working conditions and the user follows the planned maintenance operations established by the Manufacturer, it should last for three years. When the projector is discarded, it must be disposed of according to recycling laws.

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
INFINITY will not turn ON	No mains power No power to the projector Burned-out fuse	Make sure the mains power is ON and the circuit breaker hasn't been triggered Make sure the switch on the back of the projector is ON. Make sure the top lid is tightly closed Replace the burned-out fuse *Use the type of fuse indicated on the side of the fuse box
The lamp will not light	Burned-out or faulty lamp	Replace the lamp
The beam is not well defined (Faulty projection)	An optical element is damaged Malfunctioning electronic circuit The lenses and mirrors are dirty	Switch OFF the power and check the mirror and lenses. If damaged call an authorized technician Contact an authorized technician Switch off the power and clean the parts as explained in the cleaning paragraph
The projector does not respond to controller signals	Malfunctioning signal cable Wrong DMX address Malfunctioning electronic circuit Malfunctioning motor or transmission	Replace the cable and check the line before switching on again the projector Check the DMX SECTION dip-switch setting and correctly reconfigure them Contact an authorized technician
Discontinuous projector functioning	Safety thermostat has been triggered	Remove the dirt and check to see if the cooling system is working properly Contact an authorized technician
Noisy projector	Mechanical wear	Identify the source of the noise and remove the cause. Contact an authorized technician

^{*}Before switching on the projector, identify and remove the causes that made the fuse intervene.

SPARE PARTS

When ordering spare parts for the projector remember to mention the model and serial number which can be found on the plate at the rear of the projector.

Call your area dealer or feel free to contact the manufacturer for any additional assistance.

WARRANTY

INFINITY is guaranteed against any manufacturing defects or material flaws. If defects or breakdowns occur during the warranty period, the manufacturer, directly or through its agents. After inspection and according to its own unquestionable judgment, the manufacturer will repair or replace the defective part.

No goods can be returned, for any reason without previous authorisation from the manufactured, and the transport charges, to and from LAMPO are at the cost of the client.

The warranty is not valid in the following cases:

- 1 If the projector was used improperly or with negligence, or if it was damaged and repaired and/or modified to the point of jeopardizing safe functioning.
- 2 If the projector is used in conditions other that those specified in this manual.
- 3 If non-original spare parts are used.
- 4 All malfunctioning and breakdowns caused by acts of God, negligence, and improper use, and parts subject to wear are not covered by the warranty.

The improper use of this projector, cancel the guarantee and our responsibility. All the information have been written and driven with extreme care; however, we do not engage us any responsibility for contingent errors or omissions. We reserve the right to modify and/ or improve our product as we retain necessary, without subsequent warning or notice. It is forbidden any complete or partial reproduction of this handbook, if not expressly authorized.