ColorStar 500 RGB

Owner‘s Manual

DJ LASE

STARVILLE

Table of Contents

Thanks a lot for purchasing our Dj Lase ColorStar 500. Please read this user manual carefully and follow the instructions to avoid danger or damage to the unit due to mishandling. Keep this user guide for future reference. If you give the unit to another user, be sure that he also receives this instruction booklet.

Safety instruction

You have to carefully read the instruction, which includes important information about the installation, usage and maintenance, BEFORE operating this device.

- **Lasers can be hazardous and have unique safety considerations. Permanent eye injury and blindness is possible if lasers are used incorrectly. Pay close attention to each safety REMARK and WARNING statement in the user manual.**
- This device is exclusively meant to be used as an illumination effect device within the limits given in this manual. Using it in any other way puts people at risk of severe injury by laser light. Moreover you risk electric shock and warranty will become void.
- Avoid direct eye contact with laser light. Never intentionally expose your eyes or others to direct laser light.
- This laser product can potentially cause instant eye injury or blindness if laser light directly strikes the eyes.
- It is illegal and dangerous to shine this laser into audience areas, where the audience or other personnel could get direct laser beams or bright reflections into their eyes.
- Unpack and check carefully there is no transportation damage before using the unit.
- Before operating, ensure that the voltage and frequency of power supply match the power requirements of the unit as stated in this manual.
- The unit is for indoor use only. Use it only in a dry location. Exposing the device to rain or moisture would cause the risk of electrical shock or fire.
- The unit must be installed in a location with adequate ventilation, at least 50 cm from adjacent surfaces. Be sure that no ventilation slots are blocked.
- Disconnect the device from the mains power before any servicing or maintenance. Replace the fuse only with the same type. Do not use any other type of fuse.
- Never sever or manipulate the power cord or the plug. If a power cord is provided with an earth lead, this is mandatory to ensure safe operation! Otherwise a ***LIFE THREATENING*** situation exists!

- Notice regarding power disconnection:
  To disconnect the device from the power source the power plug must be removed from the power socket. For this reason the device must be placed in a position where a constant unobstructed access to the power socket is assured, thus in an emergency situation you are able to immediately pull out the power plug. To eliminate the risk of fire you must completely disconnect the power plug from the power socket after the device has been used.
- Always grasp the power cord by the plug. Do not pull on the cord itself and never touch the power cord with wet hands as this could result in a short circuit or an electrical shock. Do not place the device, speaker cabinets or anything else on the power cord and make sure that it does not become clamped. Place the power cord in a position where it can not be trod on. A damaged power cord can cause a fire or an electrical shock. Check the power cord from time to time. Should it become damaged contact our customer service centre to have it replaced.
- Keep any flammable material away from the unit while it is operating. Otherwise you run the risk of causing a fire.
- Always use appropriated lighting safety cables when hanging lights and effects overhead.
- In the event of serious operating problem, stop using the unit immediately. Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance centre. Always use the same type spare parts.
- ***WARNING!***
  This unit contains high power laser devices internally. Do not open the laser housing, due to potential exposure to unsafe levels of laser radiation. The laser power levels accessible if the unit is opened can cause instant blindness, skin burns and fires.
  There are no user serviceable parts inside the unit. Do not open the housing or attempt any repairs by yourself. If the fixture shows any visible damage or if your unit may require service, please contact your dealer.
- NEVER use the unit under the following conditions:
  > In places subject to vibrations or bumps.
  > In places with a temperature of over 40 °C or less than 10 °C.
  > In places subject to excessive dryness or humidity (ideal conditions are between 35% and 80%).
- This appliance must not be used by individuals (including children) with restricted physical, physiological or intellectual abilities or deficiencies in experience and/or knowledge unless they are supervised by a person responsible for their safety or receive from this person instruction in how

the appliance is to be used. Keep children away from the device and power cord!

- Do not switch the fixture on and off in short intervals as this would reduce the laser diode life.
- If the device has been exposed to drastic temperature fluctuation, do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.
- Every person involved with installation, operation, and maintenance of this device has to be a qualified technician and has to follow the instructions of this manual.

Laser safety information

Laser light is different from any other light source with which you may be familiar. The light from this product can potentially cause eye injury if not set up and used properly.

Laser light is thousands of times more concentrated than light from any other kind of light source. This concentration of light power can cause instant eye injuries, primarily by burning the retina (the light sensitive portion at the back of the eye). Even if you cannot feel “heat” from a laser beam, it can still potentially injure or blind you or your audience. Even very small amounts of laser light are potentially hazardous even at long distances. Laser eye injuries can happen quicker than you can blink.

It is incorrect to think that because these laser entertainment products split the laser into hundreds of beams or laser beam is scanned out in high speed, that an individual laser beam is safe for eye exposure. This laser product uses dozens of milliWatts of laser power (Class 3B levels internally). Many of the individual beams are potentially hazardous to the eyes.

It is also incorrect to assume that because the laser light is moving, it is safe. This is not true. Nor, do the laser beams always move. Since eye injuries can occur instantly, it is critical to prevent the possibility of any direct eye exposure. In the laser safety regulation, it is not legal to aim Class 3B lasers in areas where people can get exposed. This is true even if it is aimed below people’s faces, such as on a dance floor.

- Do not operate this laser device without first reading and understanding all safety and technical data in this manual.
- Always set up and install all laser effects so that all laser light is at least 3 meters (9.8 feet) above the floor on which people can stand. See “Proper Laser Set-up & Usage” section later in this manual.

- After set up, and prior to public use test the laser to ensure proper function. Do not use it, if any defect is detected. Do not use it, if the unit emits only one or two laser beams rather than dozens/hundreds, as this could indicate damage to the diffraction grating optic, and could allow emission of higher laser levels.
- Do not point lasers at people or animals.
- Never look into the laser aperture or laser beams.
- Do not point lasers in areas in which people can potentially get exposed, such as uncontrolled balconies, etc.
- Do not point lasers at highly reflective surfaces such as windows, mirrors and shiny metal. Even laser reflections can be hazardous.
- Never point a laser at aircraft, this is a federal offense. Consequently you must never point laser beams into the sky.
- Do not expose the output optic (aperture) to cleaning chemicals.
- Do not use the laser if housing is damaged or open, or if optics appear damaged in any way.
- Never leave this device running unattended.
- The operation of a class 3B laser show laser is only allowed if the show is controlled by a skilled and well-trained operator familiar with the data included in this manual.
- The legal requirements for using laser entertainment products vary from country to country. The user is responsible for the legal requirements at the location/country of use.

We will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorised modification to the device.

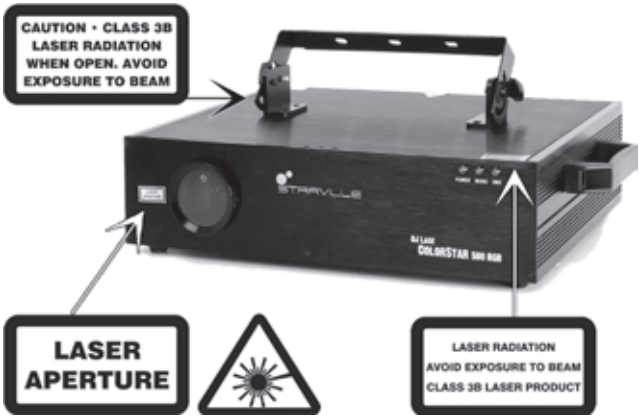
Installation

You can install the unit on the truss or ceiling. Use clamps to fix the unit to truss. Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating. Always ensure that the structure to which you are attaching the unit is secure. Also always use a safety cable that can hold 10 times of the weight of the unit when installing the fixture.

Do not shake the device. Avoid brute force when installing or operating the device.

Laser safety labels

Respect the warnings!



This label indicates the
laser beam output aperture.

Laser emission data

Laser Classification	Class 3B
Green Laser Medium	DPSS Nd: YVO4, 532 nm
Red Laser Medium	LD GaAlAs 650nm, typical
Blue Laser Medium	LD GaAlAs 405nm,typical
Beam Diameter	< 5 mm at aperture
Divergence (each beam)	< 2 mrad
Divergence (total light)	< 90 degrees
Transverse Beam Mode	TEM_{00}
Cooling	TEC & Fan Cooling
Scanning	DC to 20kHz, ±25 Degrees X & Y

Before operation

Unpacking instructions

Immediately upon receiving the fixture, carefully unpack the carton, check the contents to ensure that all parts are present, and have been received in good condition. Notify the shipper immediately and retain packing material for inspection if any part appears to be damaged by shipping or the package itself shows signs of mishandling. Save the package and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing. Make sure that the power-switch is set to off-position before you connect the device to the mains.

Scope of delivery

Laser Light	1 x
Keys (for key switch)	2 x
Interlock connector	1 x
Power supply cord	1 x
User manual	1 x

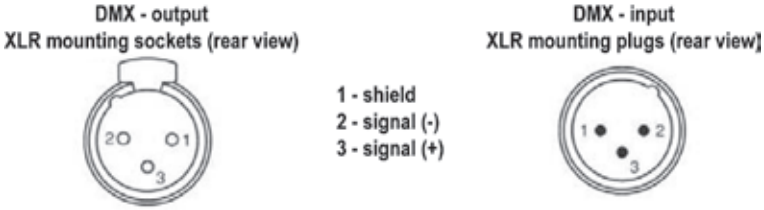
Power supply

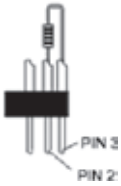
To determine the power requirements for a particular fixture, see the label affixed to the back plate of the fixture or refer to the fixture's specifications chart. A fixture's listed current rating is its average current draw under normal conditions. All fixtures must be powered directly off a switched circuit and cannot be run off a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is used solely for a 0% to 100% switch. Before applying power to a fixture, check that the source voltage matches the fixture's requirement.

DMX-512 connection between fixtures

The fixture is equipped with 3-pin XLR sockets for DMX input and output. The sockets are wired in parallel. Only use a shielded twisted-pair cable designed for 3-pin XLR-plugs and connectors in order to connect the controller with the fixture or one fixture with another.

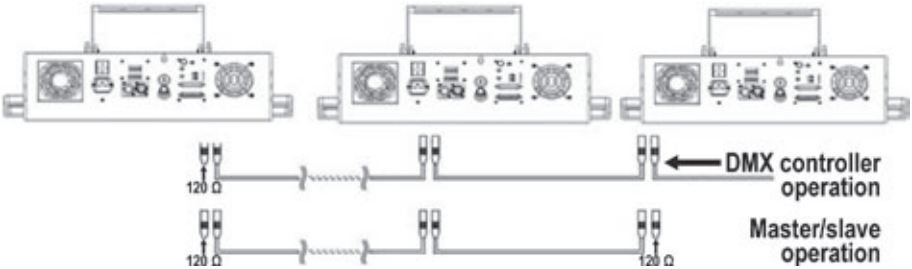
Occupation of the XLR-connection





Caution! At the last fixture please use a DMX terminator. That is a XLR plug with a 110 ohm resistor between pins 2 and 3. Plug that terminator into the DMX output of the last fixture.

Building a serial DMX chain



- If you are using standard DMX-controllers, you can connect the DMX-output of the controller directly to the DMX input of the first fixture in the DMX chain. If you wish to connect DMX controllers with different XLR outputs, you need to use adapter cables.
- Connect the DMX output of the first fixture in the DMX-chain to the DMX input of the next fixture. Always connect an output with the input of the next fixture until all fixtures are connected.
- If you use a controller with 5 pins DMX connector, you need to use a 5 to 3 pins adapter.
- At the last fixture, the DMX cable has to be terminated with a terminator. Solder a 120 Ohm 1/4W resistor between pin 2 (DMX-) and pin 3 (DMX+) into a 3 pins XLR-plug and plug it in the DMX-output of the last fixture.
- Connect the fixture together in a daisy chain by XLR plug cable from the output of the fixture to the input of the next fixture. The cable cannot be branched or split to a Y cable. DMX 512 is a very high speed signal.

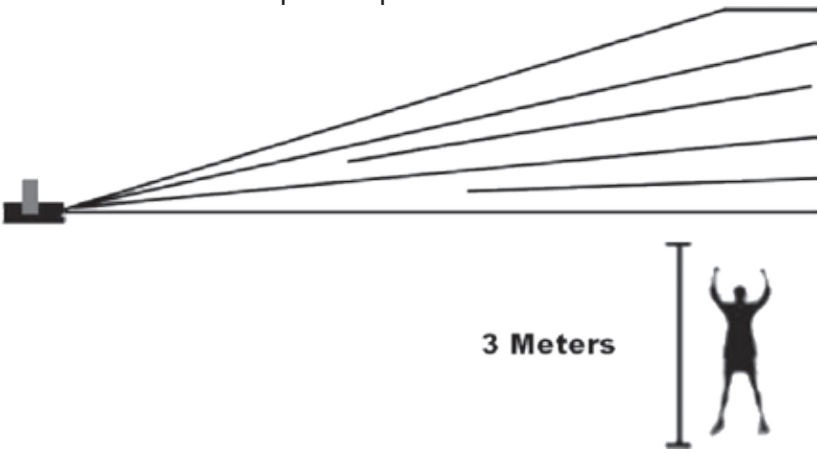
Inadequate or damaged cables, soldered joints or corroded connectors can easily distort the signal and shut down the system.

- The DMX output and input connectors are pass-through to maintain the DMX circuit, when power is disconnected to the unit.
- Each fixture needs to have a DMX address to receive data from the controller. The DMX address number which can be read from rear panel of each fixture lies between 000~511.

Proper laser set up & usage

This fixture has been designed to be hung. It is recommended for safety purposes, that your lighting effects are properly mounted using a suitable hanging clamp and safety cable. Items appropriate for safe and effective mounting are easily sourced from your lighting vendor.

International laser safety regulations require that lasers must be operated in the way illustrated below, with a minimum of 3 meters (9.8 ft) of vertical separation between the floor and the lowest laser light vertically. Additionally, 2.5 meters of horizontal separation is required between laser light and audience or other public spaces.

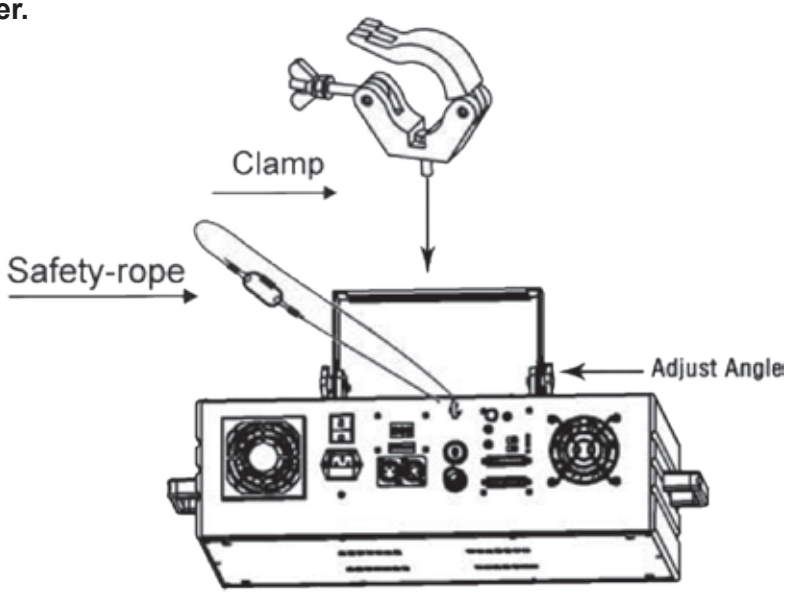


CAUTION!
Use of controls, adjustments, or performance of procedures other than what is specified herein may result in hazardous radiation exposure.

Rigging the fixture

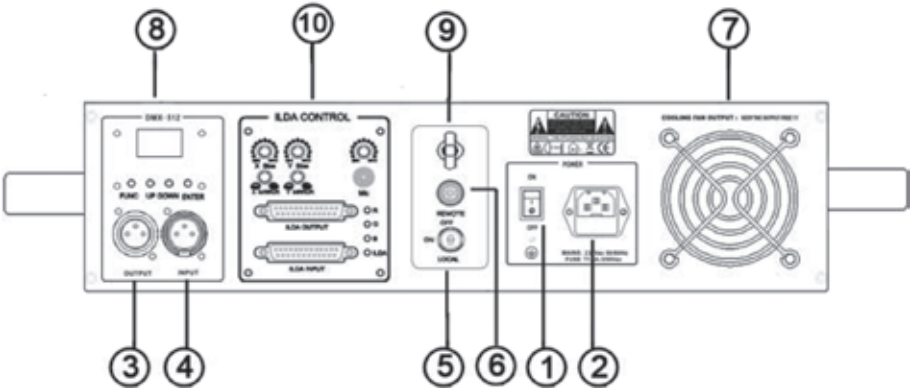
Please consider the respective national norms during the installation! The installation must only be carried out by an authorized employee or dealers!

- The installation of the fixture has to be built and constructed in a way that it can hold 10 times the weight for 1 hour.
- The installation must always be secured with a secondary safety attachment, e.g. an appropriate catch net. This secondary safety attachment must be constructed in a way that no part of the installation can fall down if the main attachment fails.
- Make sure the area below the installation place is free from unwanted persons during rigging, de-rigging and servicing.
- The operator has to make sure that safety-relating and machine-technical installations are approved by an expert before the laser device is taken into initial operation and after changes have been done.
- The operator has to make sure that safety-relating and machine-technical installations are approved by a skilled person once a year.
- The fixture must be installed in the position where persons cannot reach and where persons may walk by or be seated.
- **CAUTION: When installing the device, make sure there is no inflammable material (decoration etc.) within a distance of min 0.5 meter.**



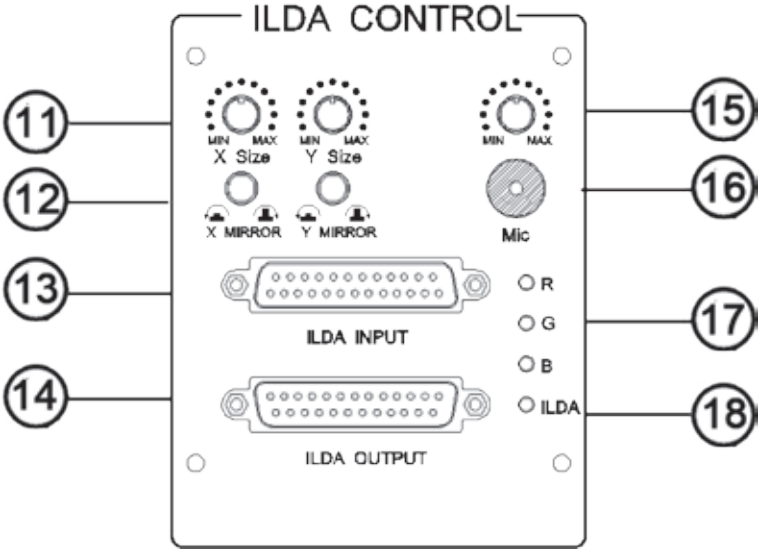
Product overview

Rear panel



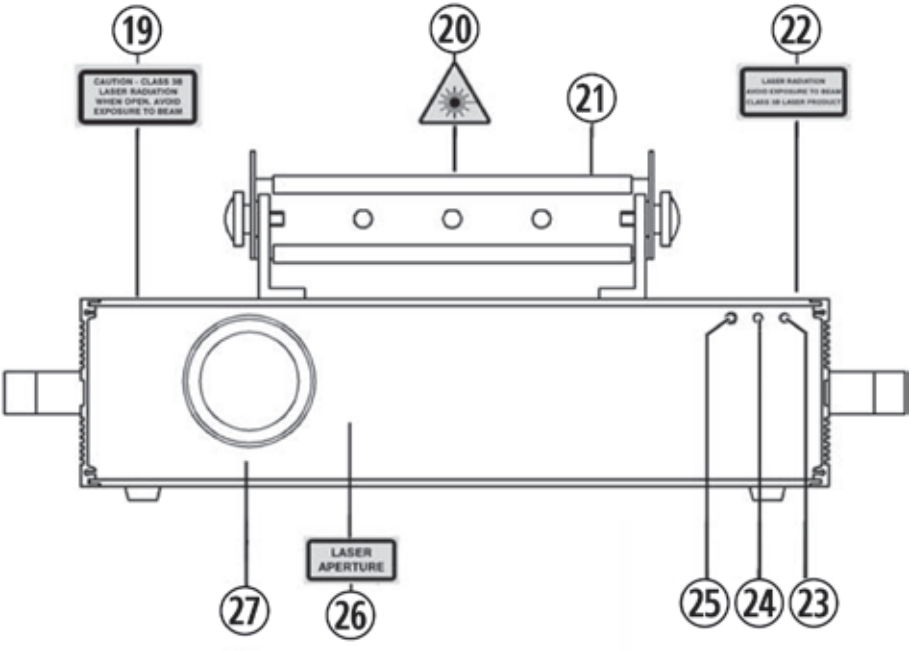
NO.	Item	Function
1	Switch	Switch on and off the power
2	Mains socket	With socket and integrated fuse holder
3	DMX OUTPUT	3-pin female XLR port using for DMX
4	DMX INPUT	3-pin male XLR port, using for DMX
5	Urgent and safe switch	Switch off the laser manually if error occurs
6	Key switch	To keep unauthorised people from operating the device
7	Cooling fan	Cooling and never cover this fan outlet
8	LED control Panel	Intelligent LED control panel of the system
9	Safety eye	Attach the safety cable
10	ILDA / Hardware Setting	Sound, Music, ILDA, Patterns Setting

ILDA / Hardware Setting Panel



NO.	Item	Function
11	X SIZE Y SIZE	The size of X / Y axis adjustment.
12	X MIRROR Y MIRROR	X / Y axis mirror setting (It could be done by LCD control panel as well).
13	ILDA INPUT	Standard ILDA DB25 input.
14	ILDA OUTPUT	Standard ILDA DB25 output (thought).
15	MIN...MAX	Turn this knob to adjust the microphone sensitivity.
16	MIC	Microphone for sound activated mode.
17	R G B	Laser beam output indicator LED.
18	ILDA	ILDA connection indicator LED. Green is connection and red is disconnection.

Front panel



NO.	Item	Function
19	Warning label	Caution - Class 3B laser.
20	Laser Warning Sign	Warns against a potentially dangerous laser when not used by skilled operators.
21	Hanging bracket	With 2 knobs on both sides to fasten the unit and a mounting hole to fix a mounting hook.
22	Warning label	Laser radiation - Avoid exposure to beam. Class 3B laser product.
23	MUSIC	Flashes to the sound of the music detected by the mic.
24	DMX	DMX connection indicated LED. Red is DMX connected. Green is preprogram standalone mode.
25	POWER	Indicates that the unit is switched on.
26	Warning label	Laser aperture.
27	Laser output	Laser output aperture.

IMPORTANT
For your own safety and full laser safety regulation, we do strongly recommend you to use this optional switch!

Control & function

- Regular breaks during operation are essential to maximize the life of this device as it is not designed for continual use.
- Do not switch the unit on and off in short time intervals.
- Always unplug the unit when it is not going to be used or starting any servicing.
- In the event of serious operation problems, stop using the fixture and contact your dealer immediately.

Attention! Laser beams will be output from laser aperture 5 seconds after the unit is powered on.

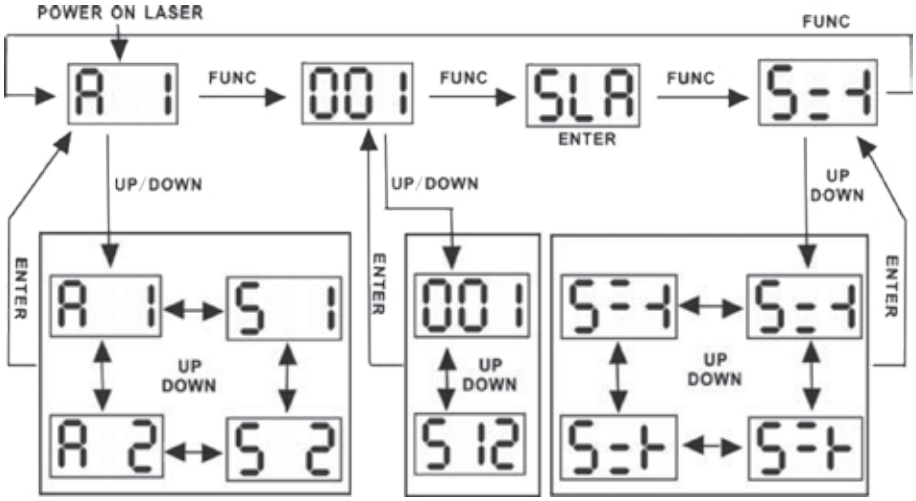
Operating Mode

When the laser is powered on, the LED monitor on rear panel shows the current operating standalone mode or DMX address, when in DMX mode. With the help of the LED control panel, it is very easy to set and change the operating mode of the device. After every resetting and saving, the new mode information will be shown on the LED monitor at next power on.

Mode/Function option, to choose the operating mode of the laser.

Confirmation, to confirm all setting or change of LED control panel.

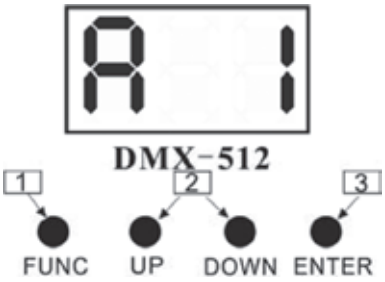
UP/DOWN, to change operating mode, parameter or DMX address.



Stand alone preprogram laser show

- Press FUNC button to call up the mode options availabe (A1: auto show 1, A2: auto show 2, S1: Sound show 1, S2: Sound show 2).
- Then press UP or DOWN button to select your favorite Stand Alone mode as stated above.
- Press ENTER to confirm the setting.

The laser is working in stand alone. Each time when you turn on your laser, you have this confirmed laser show.



In the MODE OPTION setting, the stand alone laser show that you are going to choose is flashing. Press UP or DOWN to change stand alone laser show, you will have 4 different stand alone preprogrammed laser show. Their DISPLAY and EFFECT are listed below:

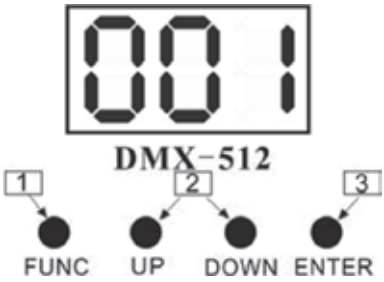
DISPLAY		STAND ALONE MODE LASER EFFECT
A 1	A1	Auto laser show with random order
A 2	A2	Auto laser show with traditional order
S 1	S1	Sound activated laser show with random order
S 2	S2	Sound activated laser show with traditional order

Attention: In S1 or S2 MODE (Sound Activated Mode), the laser will be blocked out in 3 second when MIC Signal was not detected.

DMX Mode

- Press FUNC button, until the LED panel shows “001”.
- Press UP or DOWN to select the DMX 512 address among 001-512.
- Press ENTER to confirm the setting

The laser is working in DMX MODE. With help of UP and DOWN button, the DMX address could be set.



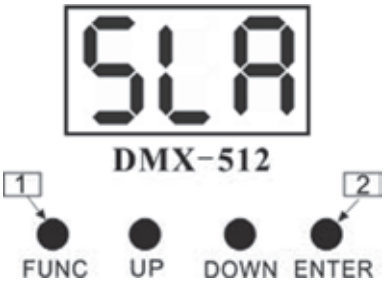
Attention: In DMX MODE, once the DMX cable is connected with laser and DMX controller, the DMX LED in front panel of laser will be ON.

SLAVE MODE

- Press FUNC button, until the LED panel shows “SLA”.
- Press ENTER to confirm the setting

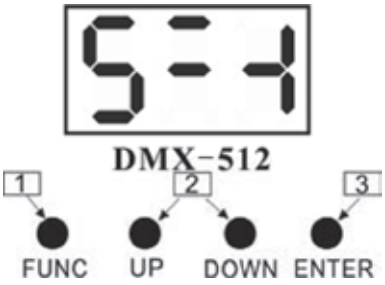
The laser is working in “SLAVE MODE”. Connect MASTER laser with several SLAVE laser with DMX cable, the SLAVE lasers do what exactly

the MASTER laser does. Please check the section “DMX-512 connection between fixtures” to have more details about laser connection.

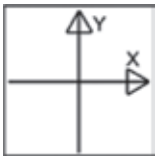
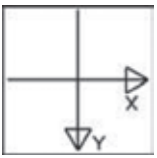
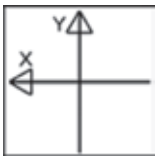
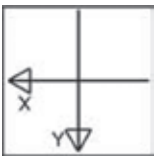


PATTERN MIRROR REVERSE SETTING

- Press FUNC button, until the LED panel show any one of S-1, S-2, S-3, S-4.
- Press UP or DOWN to select pattern mirror mode as above.
- Press ENTER to confirm the setting.



In the MODE OPTION setting, the pattern mirror mode that you are going to choose is flashing. Press UP or DOWN to change pattern mirror mode, you will have 4 different pattern mirror modes. Their DISPLAY and OUTPUT are listed below:

DISPLAY	PATTERN MIRROR OUTPUT	DISPLAY	PATTERN MIRROR OUTPUT
S-1		S-2	
S-3		S-4	

Attention: Beside of LED programmed mirror reverse setting, the laser scanned world could be set by ILDA control panel.

ILDA Control Mode

- This unit features a ILDA DB25 port, and it can be controlled by PC. There is auto transform set in the inside of the unit to transform the ILDA and preprogrammed show. When connecting with the 25 pin cable, the unit will be controlled by PC, when the unit is disconnected, it will be controlled by preprogrammed program.
- These signals, tied together at the signal source, are intended to keep the projector from outputting light if inadvertently connected to non-laser signal sources such as SCSI, parallel or serial connectors. If this loop is broken, it is required that projectors close a shutter, turn off the laser, or take other actions that prevent light from being emitted from the projector. These signals are also a fail-safe should other control measures fail. It is important to note that this portion of the ISP-DB25 is a projector interlock which may be separate from the remote interlock connector on a laser used with the projector.

DMX Channels Chart

Attention:

Several optional operating modes were preprogrammed and set into this laser projector at DMX channel 1. Before you control the device by other DMX channels, please be sure that the channel 1 was set in proper mode (value).

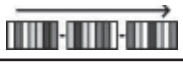
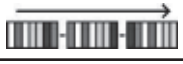
DMX PROTOCOL

CHANNEL	VALUE	DESCRIPTION
CH 1 MODES	000-016	Laser OFF ⏻
	016-055	AUTO SHOW 1
	056-095	AUTO SHOW 2
	096-135	MUSIC SHOW 1
	136-175	MUSIC SHOW 2
	176-215	DMX Mini Preprogram Show Mode
	216-255	DMX GOBO MODE

DMX MINI PREPROGRAM SHOW MODE

CHANNEL	VALUE	DESCRIPTION
CH 2 SHOWS	000-255	46 mini preprogram laser shows

DMX GOBO MODE

CHANNEL	VALUE	DESCRIPTION
CH 2 GROUP	000-255	8 Group
CH 3 PATTERN	000-255	16 Patterns in each group
CH 4 COLOR	000-007	Original 
	008-015	Red 
	016-023	Green 
	024-031	Yellow 
	032-039	Blue 
	040-047	Purple 
	048-055	Light Blue 
	056-063	White 
	064-111	Color Rolling 
	112-159	Color Jumping 
	160-127	Color Moving 
	208-255	Strobing 
CH 5 CLIPING	000	Full pattern without clipping
	001-127	0%~99% fixed pattern clipped
	128-255	Clipping Speed 

CHANNEL	VALUE	DESCRIPTION
CH 6 ZOOMING	000-127	100%-5% fixed pattern zoomed
	128-169	Zooming IN
	170-209	Zooming OUT
	210-255	Alternately Zooming
CH 7 ZOOMSPEED	000-255	Fast to Slow 
CH 8 Y AXIS ROLLING	000-127	0 -359 degree fixed Y axis rolled
	128-191	Clockwise rolling
	192-255	Anticlockwise rolling
CH 9 ROLLSPEED	0-255	Fast to Slow 
CH 10 X AXIS ROLLING	000-127	0 -359 degree fixed X axis rolled
	128-191	Clockwise rolling
	192-255	Anticlockwise rolling
CH 11 ROLLSPEED	0-255	Fast to Slow 
CH 12 Z AXIS ROLLING	000-127	0 -359 degree fixed Z axis rolled
	128-191	Clockwise rolling
	192-255	Anticlockwise rolling
CH 13 ROLLSPEED	0-255	Fast to Slow 
CH 14 X AXIS MOVING	000-127	128 different fixed position on X axis
	128-191	Clockwise moving
	192-255	Anticlockwise moving
CH 15 MOVESPEED	0-255	Fast to Slow
CH 16 X AXIS MOVING	000-127	128 different fixed position on Y axis
	128-191	Clockwise moving
	192-255	Anticlockwise moving
CH 17 MOVESPEED	0-255	Fast to Slow 

PATTERN LIST

DMX	1 Tunnel	2 Pole	3 Curves	4 Lines	5 Dots	6 Graphic	7 Numbers	8 Words
000-015								
016-031								
032-047								
048-063								
064-079								
080-095								
096-111								
112-127								
128-143								
144-159								
160-175								
176-191								
192-207								
208-223								
224-239								
240-255								

Maintenance and care

- Make sure the area below the installation place is free from unwanted persons during servicing.
- Switch off the fixture, unplug the mains cable and wait until the unit has been cooled down.
- Housings, fixations and installations spots (ceiling, truss, suspensions) should be totally free from any deformation.
- The mains cables must be in impeccable condition and should be replaced immediately when even a small problem is detected.
- In order to protect the fixture from overheating the cooling fans (if any) and ventilation openings should be cleaned monthly.
- Never submerse the device in water or any other liquid. Don‘t let any liquid get into the housing. This would damage the unit and cause a short circuit.
- Before cleaning the device you must disconnect it from the mains. Clean the surface of the device only with a slightly damp cloth. Never use petrol, solvents or any aggressive cleaners! These could damage the surface of the unit‘s housing!
- The cleaning of the aperture glass and scanner mirrors must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates: damp. smoky or particularly dirty surroundings can cause greater accumulation of dirt on the unit’s optics.
  1) Clean with a soft cloth using normal glass cleaning products.
  2) Always dry the parts carefully.
  3) Clean the Aperture glass at least once every 30 days
- The interior of the fixture should be cleaned annually using a vacuum cleaner or air-jet.

CAUTION!
We strongly recommend internal cleaning to be carried out by qualified technician only!

Troubleshooting

Following we list a few common problems that may occur during operation. We give you some suggestions for easy troubleshooting:

The fixture does not work, no laser and the fan does not work.

1) Check whether the unit is connected to mains power.
2) Let a technician measure the mains voltage. Is it within the range stated in the technical specifications?
3) Let a technician check the main fuse and/or the Power-On LED.

The fixture is powered on, but no laser is coming out of the aperture.

1) Check the laser aperture cover. Is it dirty? Then clean it.
2) Check the key switch.
3) Check the remote interlock or the interlock connector.
4) If operated in low temperature surrounding wait for at least 30 minutes to warm up.
5) Check whether it is in music mode without sound signal.
6) Check whether it is in Slave mode.
7) Check whether it is in DMX without DMX signal.

The laser effect power is very weak.

1) If operated in low temperature surrounding wait for at least 30 minutes to warm up.
2) Clean the aperture glass with alcohol.
3) Clean the scanner mirror with alcohol.
4) Check whether it is in DMX with high strobe frequency.

The laser is on, but the pattern is not moving.

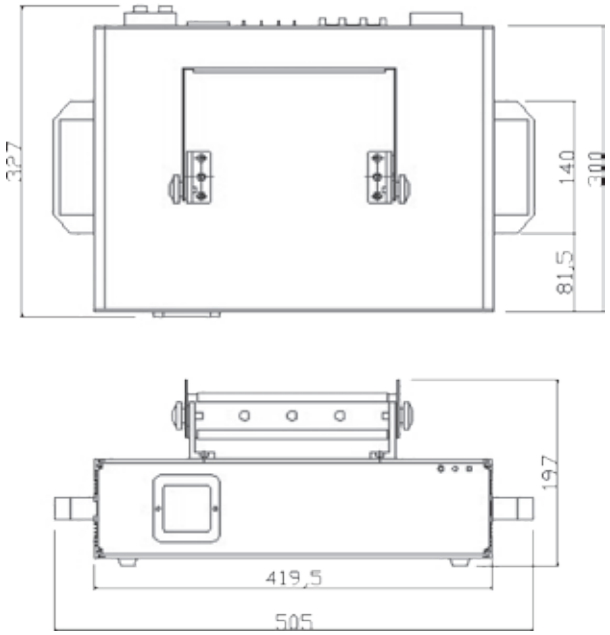
1) Check to see whether it is in Music/Sound mode without detecting sound signal.
2) Check to see whether it is in DMX mode with further DMX control.
3) Try to change the fixture's operation mode to another stand alone mode.
4) Try to control the fixture with DMX to see the laser effect system.

Not responding to DMX controller

1) Check the DMX address settings and DMX polarity.
2) If you have intermittent DMX signal problems, check the pins on connectors of the fixture or the previous one.
3) Try to use another DMX controller.
4) Check to see if the DMX cables run near or run alongside to high voltage cables that may cause damage or interference to DMX interface circuit.

Technical specifications

Mains Input:	AC 100~240 V, 50/60 Hz
Fuse:	250V 2A Slow Blow (20mm Glass)
Total Power:	50W
X/Y Axis Beam Angle:	±25°
Control Mode:	Auto, Sound, DMX, Slave, ILDA
Laser Power:	350mW 650nm Red CW 50mW 532nm Green CW 150mW 405nm Blue CW
Laser Classification:	Class 3B
Laser Safety Standard:	EN60825-1 2007
Condition Temperature:	10~40 °C
DMX Connections:	3 pins XLR Male/Female
DMX Channels	Max 17 channels
Measurement:	see diagram below
Net weight:	8 kg



Our products are subject to a process of continual further development. Therefore modifications to the technical features remain subject to change without further notice.

Disposal

Do not dispose of the device at the end of his operating life in your normal domestic waste. This device is subject to the European Guidelines 2002/96/EC.

- Have the product disposed of by a professional disposal company of by your communal disposal facility.
- Observe the currently applicable regulations. In case of doubt contact your disposal facility.
- Dispose of packaging materials in an environmentally responsible manner.

STAIRVILLE