Unpacking

Thank you for purchasing this product. Please read user guide for safety and operations information before using the product. Keep this manual for future reference. This product can create perfect laser programs and effects since it has passed a series of strictly tests before delivery. Please check the attachments listed on the page after opening the carton. In the event of carton damage or attachment missing in transit, please contact your dealer or our after sales service department.

Attachments

1. Laser Light:1PCS   2. Power Cable:1PCS   3. User Guide:1PCS

Notice

⬚ Do not exposure the human eye direct to laser beam.

⬚ Do not turn on and off the unit frequently.

⬚ Before using this unit make sure the power supply is ground.

⬚ This unit is intended for indoor use only and should be prevented form water, moisture and shake. The working temperature of this unit is 18~30℃, do not use this continuously over 4 hours, otherwise it shortens the lifetime of the unit.

⬚ Use cleaning tissue to remove the dust absorbed on the external lenses periodically to optimize light output.

⬚ Do not remove or break the warranty label, otherwise it void the warranty.

⬚ Always replace with the exact same type fuse, replacement with anything other than the specified fuse can cause fire or electric shock and damage your unit, and will void your manufactures warranty.

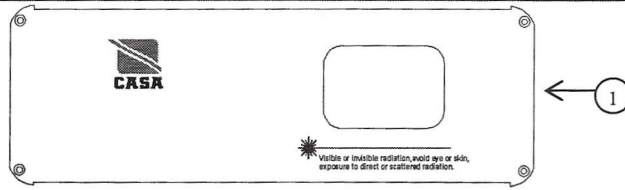⬚ AC110V/220V,Please don't arbitrarily pick,or else pays the consequences.

KEEP DRY

Technical Specification

- Voltage: AC220V/AC110V/, 50HZ/60HZ, Fuse: 2A/250V
- Rated Power: 50W
- Laser:
  100mW 405nm Blue Violet laser,50mW 532nm Green laser,100mW 650nm Red laser
- Working Modes: DMX, Sound Active, AUTO, Master-Slave
- DMX Control Channel: 9 channels
- Graphics & Effects: more than 100 patterns, over 500 effects
- Interface: 3 pins XLR jack
- Size: 330*225*160mm
- Weight: 4.0Kg

Features

- Full color Laser

  Includes full color laser effects as blue violet, green, blue,red,yellow,white. It can combine to create rich and dynamic patterns at the same time, more than 100 laser patterns, over 500 laser effects.

- Various working modes

  Includes four working modes as DMX, Sound Active, AUTO and Master-Slave trol mode, different working modes has different program for different applications.

- DMX control

  The unit has 9 channels to control in DMX mode. The unit has BLACK OUT function.The uint will shut OFF if no DMX512 signal.

- Master-Slave function

  The system allow link many units (as slave unit) together to doing synchro job without console in sound active or AUTO mode.

- LED indicating and shut-off function

  In sound active mode, the unit's panel has LED indicating for sound active. The unit will shut off after 8 seconds when the music stops.

- DPSS Laser

  Use Diode-Pumped Solid State green laser, stable output and long working life.

Front/Rear Panel

Visible or invisible radiation, avoid eye or skin,
exposure to direct or scattered radiation.

1. Laser Aperture One
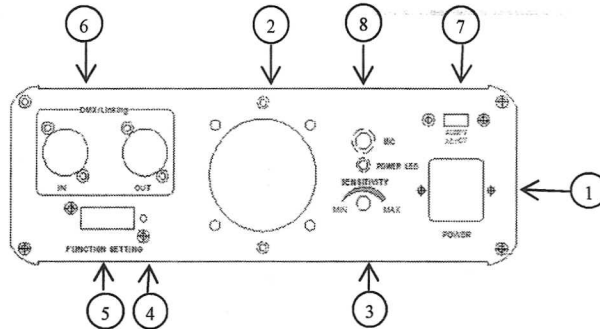
1. Power Jack	2. Cooling Fan
3. Audio Sensitivity Knob	4. DMX Signal Indicator: Green
5. Dipswitches: Function Setting	6. DMX or Linking Jack
7.On/Off	8. Power Indicator:Red/Sound Active Microphone

Function & Setting

Sound Active

The change of the laser pattern is controlled by sound, that is, the rhythm of the sound control the effect of the changing laser pattern. Turning the sensitivity knob in the clockwise direction to increase the fixture's sensitivity to sound, the knob in the counter clockwise direction to decrease. The laser diode will automatically turn off after 8 seconds when the music stops.

AUTO

Auto cycles the built-in programs without being controlled externally. It has no laser OFF

DMX Control

The system only accepts the DMX512 signal of international standard to control the system mode, the laser pattern ON /OFF, the size, the position, the speed, the color etc.

DMX Control Parameter Chart

Channel	Function	Value	Description
CH1	Mode	0~49	Close, laser OFF
		50~99	Sound active mode
		100~149	Auto mode
		150~199	Static patterns of DMX mode
		200~255	Dynamic patterns of DMX mode
CH2	Pattern selection	0~255	52 static/dynamic patterns
CH3	Position-X	0~255	Adjust position-X
CH4	Position-Y	0~255	Adjust position-Y
CH5	Scanning speed	0~255	0 is speedy, 255 is slow
CH6	Dynamic pattens play speed	0~255	0 is speedy, 255 is slow, has ten grade speed
CH7	Static pattern size	0~255	0 is small, 255 is big
CH8	Color Selection	0~255	V, G, S, 3 colors combinered
CH9	Color Segment	0~255	Divide into 1 to 51 segment

CH2 Parameter Chart For Function

DMX value	Static patterns	Dynamic patterns	DMX value	Static patterns	Dynamic patterns
0~4	one circle	circle to big	130~134	triangle 2	two hori dot line mov
5~9	empty circle	empty circle to big	135~139	dot triangle 2	vertical line move
10~14	dot circle	dot circle to big	140~144	chiasma line	vert-dot line move
15~19	scan circle	scan circle to big	145~149	chia-dot line	two vertical line mov
20~24	two circle	circle roll	150~154	square	two vert-dot line mov
25~29	three circle	empty circle roll	155~159	dot square	square extend
30~34	four circle	dot circle roll	160~164	rectangle	dot square extend
35~39	two emp-circle	circle turn	165~169	dot rectangle	pentagon extend
40~44	two dot circle	dot circle to add	170~174	many hori-line	square turn
45~49	hor-extend line	circle jump	175~179	many vert-line	pentagon turn
50~54	hori-shrink line	scan circle extend	180~184	tetragon 1	line scan
55~59	hori-flex line	circle flash	185~189	tetragon 2	dot line scan
60~64	horizontal line	empty circle roll	190~194	pentagon 1	wave turn
65~69	hori-dot line	two circle turn	195~199	pentagon 2	dot wave turn
70~74	vertical line	four circle turn	200~204	pentagon 3	wave flowing

DMX value	Static patterns	Dynamic patterns	DMX value	Static patterns	Dynamic patterns
75~79	hori-dot line	diagonal jump	205~209	wave line 1	dot wave flowing
80~84	45° diagonal	sector to big	210~214	wave line 2	sine wave
85~89	dot diagonal	dot sector to big	215~219	wave line 3	dot sine wave
90~94	two hori-line	diagonal move	220~224	wave dot line	tetragon turn
95~99	two hori-dot lin	dot diagonal move	225~229	spirality line	pentagon star 1 turn
100~104	two vert-line	long sector round	230~234	welcome	pentagon star 2 turn
105~109	two vert-dot lin	short sector round	235~239	horizontal dot	square dot jump
110~114	V line	three line round	240~244	vertical dot	bird fly
115~119	V dot line	hori line move	245~249	many dot 1	many dot jump 1
120~124	triangle 1	hori dot line move	250~254	square dot	V pattern move
125~129	dot triangle 1	two hori line move	255	many dot 2	many dot jump 2

CH8 Parameter Chart For Color Selection

ch8 value	0~29	30~59	60~89	90~119	120~149	150~179	180~209	210~255
color	silver/Y	green/G	Violet/R	S+G	G+V	V+S	V+G+S	moving VGS

NOTE:

▣ There are 52 static patterns, the sizes of the patterns that DMX value is 170 previous are adjustable, the following irregular patterns are non-adjustable. There are 52 dynamic patterns, whose sizes are non-adjustable.

▣ Only circle pattern has color segment function, it needs to operate with both CH8 and CH9.

Function Setting

Uses dipswitches to assign a unit's function: DMX/slave, or sound active, or AUTO mode.For the unit is DMX mode, set the DMX address. Each dipswitch represents a binary value. See the "Function chart".

O=OFF   1=ON   X=OFF or ON

DIPSWITCH CHART										FUNCTION	
#1	#2	#3	#4	#5	#6	#7	#8	#9	#10		
X	X	X	X	X	X	X	X	0	1	SOUND	ACTIVE
X	X	X	X	X	X	X	X	1	1	AUTO	MODE
SET DMX ADDRESS FOR DMX MODE									0	DMX / SLAVE	

Dipswitch #10 is use to set master or slave mode. Master modes have sound active and AUTO mode. Slave modes have DMX and Slave mode. The units automatically identify

DMX or SLAVE mode by data receives. Dipswitch #9 use to is set sound active or AUTO mode in master mode.

DMX address calculation

For DMX mode, DMX512 address from #1 to 9# dipswitches must be set, the address is set from 1 to 511. Each dipswitch represents a binary value.

Dipswitch	Value	Dipswitch	Value
#1	1	#6	32
#2	2	#7	64
#3	4	#8	128
#4	8	#9	256
#5	16	#10	Set to "0"

One unit has 9 channels, so each unit must be assigns 9 channels at least. We may assign 16 channels for one unit, then DMX address = $16*N + 1$, N=0, 1, 2, 3 ......

Example

One loop address=1, two loop address=9, three loop address=17, four loop address=25

Loop	Address	Binary	Dipswitches
1	1	100000000	#1
2	17	100010000	#1+#5
3	33	100001000	#1+#6
4	49	100011000	#1+#5+#6

Operation

### Stand-Alone Operation (Sound Active, AUTO mode)

The mode allows a single unit to react to the beat of the music in the master mode.

- Install the units in a suitable position (laying or appending).
- Set dipswitch to select Sound Active or AUTO mode.
- Turn on the unit power, the unit begins reset, then the unit begins working.
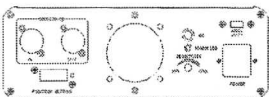- The unit will react to the low frequencies of music via the internal microphone.
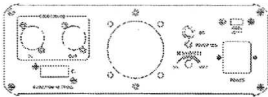
POWER   POWER   POWER
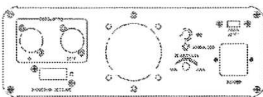
1: Master: Sound/AUTO   2: Master: Sound/AUTO   N: Master: Sound/AUTO

4. Turn on the all units' power, the units begins reset, then the unit begins working.

5. Use DMX console to control your units.

Notes:

1. DMX console can not be used in Master-Slave operation (Sound Active or AUTO mode).

2. There should be only one master unit in Master-Slave operation.

Troubleshooting

1. If the power supply indicator doesn't light up and the laser doesn't work, please check the power supply and the input voltage.

2. In Stand-Alone operation, if the power supply indicator is light up and sound active indicator isn't light up, but the laser is shut off doesn't work.

A. Because sound is too small make for laser shut off in sound active, please increase the music volume or increase audio sensitivity with sensitivity knob, please check as below.

B. Please check if unit has been set up in slave mode, then set up in master mode.

3. In Master-Slave operation, slave unit don't function, please check as below.

A. Make sure to there's only one master in the chain, and the others are set in slave mode.

B. Make sure to control the unit without DMX console controlling.

C. Make sure to take a good quality power cable and connection.

4. In DMX mode operation, the laser is OFF and the DMX signal indicator is unlighted, please check as below.

A. Make sure to set up the DMX mode.

B. Make sure to have a good connection.

5. In DMX operation, the unit can't be controlled by the DMX console, but the DMX signal indicator is flashing, please make sure the DMX console and unit have the same channel.

6. If the output beam direction above isn't the right way, please restart the unit.

7. If the unit is fail, please turn off the unit, then turn on again after 5 minutes.

After trying the above solution you still have a problem, please contact your dealer or our company for service.