

light
BIG

DESIGN BY GERMANY

LASER SHOW SYSTEM

DOUBLE Green+Violet LASER SROW

Model: BE-558A

User Guide

General Instructions

Unpacking:

Thank you for purchasing this product. Please read user guide for safety and operation instructions before using the product. Keep this manual for future reference. This product can ensure perfect laser performance and effects when it has passed a series of strictly tests before delivery. Please check the attachments listed on this 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:

1. Do not expose the human eye directly to laser beam.
2. Do not turn on and off the unit frequently.
3. Before using this unit make sure the power supply is grounded.
4. This unit is intended for indoor use only and should be protected from water, moisture and rain. The working temperature of this unit is 10°C-30°C. Do not use this continuously over 4 hours, otherwise it will reduce the lifetime of the unit.
5. Use cleaning brush to remove the dust adhered on the external lenses periodically to optimize light output.
6. Do not remove or break the warranty label, otherwise it void the warranty.
7. Always replace with the exact same type fuse, replacement with anything other than the specified fuse may cause fire or electric shock and damage your unit, and will void your manufacturer's warranty.



DANGER
LASER RADIATION AVOID EXPOSURE
IT IS AN CLASS 3B LASER PRODUCT



Technical Specification

1. Voltage: EAC220V, 50-60HZ, Power: 2A/250V
2. Rated Power: 30W
3. Laser: Double Diode (green+red) laser model: 50mW (572nm)+10mW (660nm)
4. Working Mode: DMA, Sound Active, AUTO Master Shut
5. DMA Control Channel: 7 channels
6. Graphics in P-Block: more than 100 pages, over 300 effects
7. Interface: 3 pins XLR Jack for T.M.R. or Master-Slave linking
8. Size: 330*130*120mm
9. Weight: 3.5kg

Features

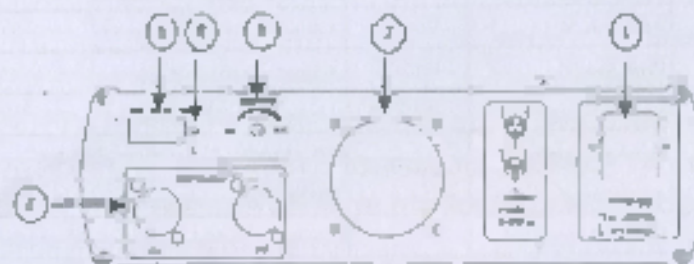
1. Various working modes
Includes like working modes as DMA, Sound Active, AUTO with Master-Slave Control for different applications.
2. Various programs
The double monol laser beam is composed, strength as 50 laser patterns, over 200 laser effects. Different working modes use different program.
3. DMA control
The unit has 7 channels in control in DMA mode. The unit has BLACK OUT function. The unit will shut off if no DMA512 signal.
4. Master-Slave function
The system allow itself many units (as slave unit) together as being, sync to job without console as sound active or AUTO mode.
5. 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 5 seconds when the music stops.
6. DFS Laser
Use Diode Pumped Solid State laser, stable output and long working life.

Front/Rear Panel



Front Panel Figure

- | | |
|--------------------------------|----------------------------|
| 1. Laser & pattern One | 2. Solid Active Microphone |
| 3. Sound Active Indicator Blue | 4. Power thermostat Red |



Rear Panel Figure

- | | |
|------------------------------------|-------------------------------|
| 1. Power Jack | 2. Control Knob |
| 3. Audio Sensitivity Knob | 4. DMA Signal Indicator Green |
| 5. Dipswitch, for Function setting | 6. DMA or Linking Jack |

Function & Setting

Sound Active

The change of the laser pattern is controlled by sound. That is, the rhythm of the sound decides the effect of the changing laser pattern. Turning the sensitivity knob in the clockwise direction will increase the factor of sensitivity to sound, the same in the counter clockwise direction will decrease. The laser diode will automatically turn off after 5 seconds when the music stops.

AUTO

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

DMA Control

The system only accepts the DMX312 signal of internal level standard to control the system mode. The linear system ON RAMP, the start, & stop time, the speed, etc.

DMX Control Parameters Chart

Label	Function	Value	Description
CH1	Mode	40~49	Close linear GEF
		50~59	Sound active mode
		100~154	AUTO mode
		150~192	Static patterns of 2/3/4/5 mode
		100~154	Dynamic patterns of DMX mode
CH2	Pattern selection	0~255	52 static dynamic patterns
CH3	Position X	0~155	Adjust position X
CH4	Position Y	0~155	Adjust position Y
CH5	Intermittent speed	0~155	U is speed, 255 is stop
CH6	Dynamic pattern play speed	0~155	0 is speed, 155 is slow, just level gradient set
CH7	Start to restart time	0~255	U is level, 255 is high

CH2 Parameter Chart For Function

DMX value	Static pattern	Dynamic pattern	DMX value	Static pattern	Dynamic pattern
1~3	none	no fr. 1/2	10~154	Close curve	Auto strategies set on
37~39	dec. curve 1	dec. curve 2/3	100~130	Intermittent	Intermittent
38~41	dec. curve 1	Intermittent 2/3	100~140	Intermittent 2/3	Intermittent 2/3
41~45	Intermittent 2/3	Intermittent 2/3	145~149	Intermittent 2/3	Intermittent 2/3
41~44	Intermittent 2/3	Intermittent 2/3	150~154	Intermittent 2/3	Intermittent 2/3
150~153	Intermittent 2/3	Intermittent 2/3	150~154	Intermittent 2/3	Intermittent 2/3
30~34	Intermittent 2/3	Intermittent 2/3	100~130	Intermittent 2/3	Intermittent 2/3
55~58	Intermittent 2/3	Intermittent 2/3	100~130	Intermittent 2/3	Intermittent 2/3
40~44	40% dec. curve	Intermittent 2/3	150~154	Intermittent 2/3	Intermittent 2/3
45~49	Intermittent 2/3	Intermittent 2/3	150~154	Intermittent 2/3	Intermittent 2/3
50~54	Intermittent 2/3	Intermittent 2/3	100~130	Intermittent 2/3	Intermittent 2/3
20~23	Intermittent 2/3	Intermittent 2/3	100~130	Intermittent 2/3	Intermittent 2/3
00~04	Intermittent 2/3	Intermittent 2/3	100~130	Intermittent 2/3	Intermittent 2/3

DMX value	Static pattern	Dynamic pattern	DMX value	Static pattern	Dynamic pattern
00~04	Intermittent 2/3	Intermittent 2/3	100~130	Intermittent 2/3	Intermittent 2/3
05~09	Intermittent 2/3	Intermittent 2/3	100~130	Intermittent 2/3	Intermittent 2/3
10~14	Intermittent 2/3	Intermittent 2/3	100~130	Intermittent 2/3	Intermittent 2/3
15~19	Intermittent 2/3	Intermittent 2/3	100~130	Intermittent 2/3	Intermittent 2/3
20~24	Intermittent 2/3	Intermittent 2/3	100~130	Intermittent 2/3	Intermittent 2/3
25~29	Intermittent 2/3	Intermittent 2/3	100~130	Intermittent 2/3	Intermittent 2/3
30~34	Intermittent 2/3	Intermittent 2/3	100~130	Intermittent 2/3	Intermittent 2/3
35~39	Intermittent 2/3	Intermittent 2/3	100~130	Intermittent 2/3	Intermittent 2/3
40~44	Intermittent 2/3	Intermittent 2/3	100~130	Intermittent 2/3	Intermittent 2/3
45~49	Intermittent 2/3	Intermittent 2/3	100~130	Intermittent 2/3	Intermittent 2/3
50~54	Intermittent 2/3	Intermittent 2/3	100~130	Intermittent 2/3	Intermittent 2/3
55~59	Intermittent 2/3	Intermittent 2/3	100~130	Intermittent 2/3	Intermittent 2/3
60~64	Intermittent 2/3	Intermittent 2/3	100~130	Intermittent 2/3	Intermittent 2/3
65~69	Intermittent 2/3	Intermittent 2/3	100~130	Intermittent 2/3	Intermittent 2/3
70~74	Intermittent 2/3	Intermittent 2/3	100~130	Intermittent 2/3	Intermittent 2/3
75~79	Intermittent 2/3	Intermittent 2/3	100~130	Intermittent 2/3	Intermittent 2/3
80~84	Intermittent 2/3	Intermittent 2/3	100~130	Intermittent 2/3	Intermittent 2/3
85~89	Intermittent 2/3	Intermittent 2/3	100~130	Intermittent 2/3	Intermittent 2/3
90~94	Intermittent 2/3	Intermittent 2/3	100~130	Intermittent 2/3	Intermittent 2/3
95~99	Intermittent 2/3	Intermittent 2/3	100~130	Intermittent 2/3	Intermittent 2/3

There are 52 static patterns, the start of last pattern that DMX value is 149 previous, are adjustable, the following irregular patterns are non-adjustable. There are 52 dynamic patterns, where start are each adjustable.

Function Setting

Users can switch to assign a unit to function: DMX/Slave or stand alone of AUTO mode. For the unit in DMX mode, set the DMX address. Each dipswitch represents a binary value for the "Function chart".

0=OFF 1=ON X=OFF or ON

DIPSWITCH CHART										FUNCTION
D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	
X	X	X	X	X	X	X	X	0	1	SOUND ACTIVE
X	X	X	X	2	X	3	X	3	1	AUTO MODE
X IF DMX ADDRESS FOR DMX MODE									0	ONLY SLAVE

Function Chart

Dipswitch #10 is use or master or slave mode. Master modes have sound active and AUTO mode. Slave modes have DMX mode Slave mode. The unit automatically identify DMX or SLAVE mode by wire connection. Dipswitch #9 setting is use sound active or AUTO mode in master mode.

DMX address calculation

For DMX mode, DMX 512 address from #1 to #99 depends on how far up 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"

Our unit has 7 channels, so each unit must be assigned 7 channels at least. We can assign 8 channels (the one left, start DMX address = $8 \times N + 1$, $N=0, 1, 2, \dots$)

Example

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

Loop	Address	Binary	Dipswitch
1	1	00000000	#1
2	9	10010000	#1+#4
3	17	10001000	#1+#5
4	25	00110000	#1+#4+#5

The dipswitches setting for DMX address: see the "DMX Address" page.

Operation

Stand-Alone Operation (Send Active, AUTO mode)

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

1. Install the unit in a suitable position (hanging or appending).
2. Set dipswitch to select Send Active or AUTO mode.
3. Turn on the unit power, the unit begins reset, then the unit begins working.
4. The unit will react to the low frequencies of music via the internal microphone. Adjust the noise sensitivity knob on the back of the unit to make the unit more or less sensitive in sound active. The panel has LED indicating for sound active.

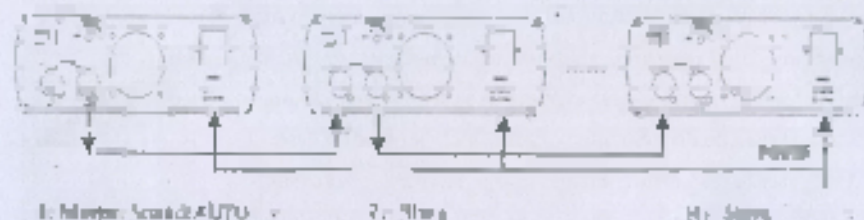


Page 6

Master-Slave Operation

This mode will allow you to link up to 32 units together in a daisy chain.

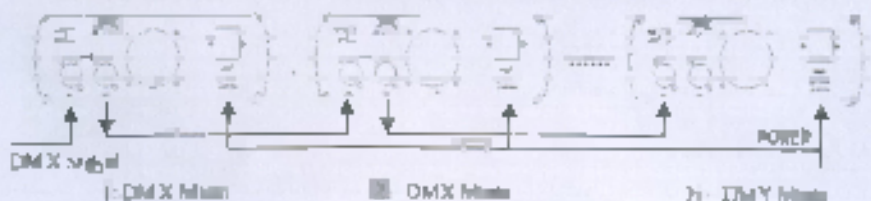
1. Install the units in a suitable position (hanging or appending).
2. Choose a unit to function as Master mode, set dipswitch to select Send Active or AUTO mode. The others must be set in Slave mode, set dipswitch to select Slave mode.
3. Use standard XLR microphone cable chain your units together via the XLR connector on the rear of the units. For longer cable runs we suggest a terminator at the last fixture.
4. Turn on the all units power, the unit begins reset, then the unit begins working. The slave units will react to the music via the master unit.
5. The slave will react to the low frequencies of music via the internal microphone. Adjust the noise sensitivity knob on the back of the master unit to make the unit more or less sensitive in sound active. The panel has LED indicating for sound active.



Universal DMX Operation (DMX mode)

This mode allows you to use units as a DMX 512 controller to operate.

1. Install the units in a suitable position (hanging or appending).
2. Use standard XLR microphone cable chain your units together via the XLR connector on the rear of the unit. For longer cable runs we suggest a terminator at the last fixture.
3. Assign a DMX address to each the unit using dipswitches, with a "DMX Address Quick Reference Chart".
4. Turn on the all units power, the unit begins reset, then the unit begins working.
5. Use DMX controller to control your units.



Page 7

Notes:

- DMX console unit not to work in Master-Slave operation (Should always in AUTO mode.)
- There should be only one master unit in Master-Slave operation.

Troubleshooting

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

2. In Stand-By mode, if the power supply indicator is light up and sound active, but not light up, but the lamp is also off, doesn't work.

A. Decrease sound is too small or too low, turn with **RECALL** or **STAND-BY** active, please increase the static volume or increase with sensitivity with sensitivity knob, please check as below:

1. Please check if unit has been set up in slave mode, this set up in master mode.

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

A. Make sure all cables are correctly connected to the chain, and the effect are on in stage mode.

B. Make sure to connect the coil without DMX cables connecting.

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

4. In DMX mode operation, the unit is OFF and the DMX signal joints are not lit, please check as below:

A. Make sure to set up the DMX mode.

B. Make sure to have a good connection.

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

A. If the receptor beam direct on shows isn't the right way, please restart the unit.

7. If the unit is fail, please to reset the unit, then call our support center 5 years later.

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

DMX Address Chart

This chart lists the DMX channel numbers for DMX address 1 through 512. Follow the next sections below to configure channel dip switches with your desired DMX address.

DMX Address Quick Reference Chart

Dip Switch Position

DMX ADDRESS SET	SW 1	SW 2	SW 3	SW 4	SW 5	SW 6	SW 7	SW 8	SW 9	SW 10	SW 11	SW 12	SW 13	SW 14	SW 15	SW 16	SW 17	SW 18	SW 19	SW 20	
01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Dip Switch Position

DMX Address