

LASER SHOW SYSTEM

UNITED ANIMATION SERIES

MODEL **AU10RGB**

MODEL **AU20RGB**

MODEL **AU30RGB**

**User Guide**

## DMX Address Chart

This chart lists the DMX dipswitch setting for DMX address 1 through 511. Follow the instructions below to configure fixture dipswitches with you desired DMX address.

### DMX Address Quick Reference Chart

| DMX: DIPSWITCH SET<br>0=OFF<br>1=ON<br>X=OFF or ON |    |    |    |    |    | DipSwitch Position |    |     |     |     |     |     |     |     |     |     |     |     |     |     |   |   |
|--|----|----|----|----|----|--------------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|---|
|  |    |    |    |    |    | #9                 | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 1   | 1   | 1   | 1   | 1   | 1   | 1 | 1 |
|  |    |    |    |    |    | #8                 | 0  | 0   | 0   | 0   | 1   | 1   | 1   | 1   | 0   | 0   | 0   | 0   | 1   | 1   | 1 | 1 |
|  |    |    |    |    |    | #7                 | 0  | 0   | 1   | 1   | 0   | 0   | 1   | 1   | 0   | 0   | 1   | 1   | 0   | 0   | 1 | 1 |
| #6   | 0  | 1  | 0  | 1  | 0  | 1                  | 0  | 1   | 0   | 1   | 0   | 1   | 0   | 1   | 0   | 1   |     |     |     |     |   |   |
| #1   | #2 | #3 | #4 | #5 |    |                    |    |     |     |     |     |     |     |     |     |     |     |     |     |     |   |   |
| 0  | 0  | 0  | 0  | 0  |    | 32                 | 64 | 96  | 128 | 160 | 192 | 224 | 256 | 288 | 320 | 352 | 384 | 416 | 448 | 480 |   |   |
| 1  | 0  | 0  | 0  | 0  | 1  | 33                 | 65 | 97  | 129 | 161 | 193 | 225 | 257 | 289 | 321 | 353 | 385 | 417 | 449 | 481 |   |   |
| 0  | 1  | 0  | 0  | 0  | 2  | 34                 | 66 | 98  | 130 | 162 | 194 | 226 | 258 | 290 | 322 | 354 | 386 | 418 | 450 | 482 |   |   |
| 1  | 1  | 0  | 0  | 0  | 3  | 35                 | 67 | 99  | 131 | 163 | 195 | 227 | 259 | 291 | 323 | 355 | 387 | 419 | 451 | 483 |   |   |
| 0  | 0  | 1  | 0  | 0  | 4  | 36                 | 68 | 100 | 132 | 164 | 196 | 228 | 260 | 292 | 324 | 356 | 388 | 420 | 452 | 484 |   |   |
| 1  | 0  | 1  | 0  | 0  | 5  | 37                 | 69 | 101 | 133 | 165 | 197 | 229 | 261 | 293 | 325 | 357 | 389 | 421 | 453 | 485 |   |   |
| 0  | 1  | 1  | 0  | 0  | 6  | 38                 | 70 | 102 | 134 | 166 | 198 | 230 | 262 | 294 | 326 | 358 | 390 | 422 | 454 | 486 |   |   |
| 1  | 1  | 1  | 0  | 0  | 7  | 39                 | 71 | 103 | 135 | 167 | 199 | 231 | 263 | 295 | 327 | 359 | 391 | 423 | 455 | 487 |   |   |
| 0  | 0  | 0  | 1  | 0  | 8  | 40                 | 72 | 104 | 136 | 168 | 200 | 232 | 264 | 296 | 328 | 360 | 392 | 424 | 456 | 488 |   |   |
| 1  | 0  | 0  | 1  | 0  | 9  | 41                 | 73 | 105 | 137 | 169 | 201 | 233 | 265 | 297 | 329 | 361 | 393 | 425 | 457 | 489 |   |   |
| 0  | 1  | 0  | 1  | 0  | 10 | 42                 | 74 | 106 | 138 | 170 | 202 | 234 | 266 | 298 | 330 | 362 | 394 | 426 | 458 | 490 |   |   |
| 1  | 1  | 0  | 1  | 0  | 11 | 43                 | 75 | 107 | 139 | 171 | 203 | 235 | 267 | 299 | 331 | 363 | 395 | 427 | 459 | 491 |   |   |
| 0  | 0  | 1  | 1  | 0  | 12 | 44                 | 76 | 108 | 140 | 172 | 204 | 236 | 268 | 300 | 332 | 364 | 396 | 428 | 460 | 492 |   |   |
| 1  | 0  | 1  | 1  | 0  | 13 | 45                 | 77 | 109 | 141 | 173 | 205 | 237 | 269 | 301 | 333 | 365 | 397 | 429 | 461 | 493 |   |   |
| 0  | 1  | 1  | 1  | 0  | 14 | 46                 | 78 | 110 | 142 | 174 | 206 | 238 | 270 | 302 | 334 | 366 | 398 | 430 | 462 | 494 |   |   |
| 1  | 1  | 1  | 1  | 0  | 15 | 47                 | 79 | 111 | 143 | 175 | 207 | 239 | 271 | 303 | 335 | 367 | 399 | 431 | 463 | 495 |   |   |
| 0  | 0  | 0  | 0  | 1  | 16 | 48                 | 80 | 112 | 144 | 176 | 208 | 240 | 272 | 304 | 336 | 368 | 400 | 432 | 464 | 496 |   |   |
| 1  | 0  | 0  | 0  | 1  | 17 | 49                 | 81 | 113 | 145 | 177 | 209 | 241 | 273 | 305 | 337 | 369 | 401 | 433 | 465 | 497 |   |   |
| 0  | 1  | 0  | 0  | 1  | 18 | 50                 | 82 | 114 | 146 | 178 | 210 | 242 | 274 | 306 | 338 | 370 | 402 | 434 | 466 | 498 |   |   |
| 1  | 1  | 0  | 0  | 1  | 19 | 51                 | 83 | 115 | 147 | 179 | 211 | 243 | 275 | 307 | 339 | 371 | 403 | 435 | 467 | 499 |   |   |
| 0  | 0  | 1  | 0  | 1  | 20 | 52                 | 84 | 116 | 148 | 180 | 212 | 244 | 276 | 308 | 340 | 372 | 404 | 436 | 468 | 500 |   |   |
| 1  | 0  | 1  | 0  | 1  | 21 | 53                 | 85 | 117 | 149 | 181 | 213 | 245 | 277 | 309 | 341 | 373 | 405 | 437 | 469 | 501 |   |   |
| 0  | 1  | 1  | 0  | 1  | 22 | 54                 | 86 | 118 | 150 | 182 | 214 | 246 | 278 | 310 | 342 | 374 | 406 | 438 | 470 | 502 |   |   |
| 1  | 1  | 1  | 0  | 1  | 23 | 55                 | 87 | 119 | 151 | 183 | 215 | 247 | 279 | 311 | 343 | 375 | 407 | 439 | 471 | 503 |   |   |
| 0  | 0  | 0  | 1  | 1  | 24 | 56                 | 88 | 120 | 152 | 184 | 216 | 248 | 280 | 312 | 344 | 376 | 408 | 440 | 472 | 504 |   |   |
| 1  | 0  | 0  | 1  | 1  | 25 | 57                 | 89 | 121 | 153 | 185 | 217 | 249 | 281 | 313 | 345 | 377 | 409 | 441 | 473 | 505 |   |   |
| 0  | 1  | 0  | 1  | 1  | 26 | 58                 | 90 | 122 | 154 | 186 | 218 | 250 | 282 | 314 | 346 | 378 | 410 | 442 | 474 | 506 |   |   |
| 1  | 1  | 0  | 1  | 1  | 27 | 59                 | 91 | 123 | 155 | 187 | 219 | 251 | 283 | 315 | 347 | 379 | 411 | 443 | 475 | 507 |   |   |
| 0  | 0  | 1  | 1  | 1  | 28 | 60                 | 92 | 124 | 156 | 188 | 220 | 252 | 284 | 316 | 348 | 380 | 412 | 444 | 476 | 508 |   |   |
| 1  | 0  | 1  | 1  | 1  | 29 | 61                 | 93 | 125 | 157 | 189 | 221 | 253 | 285 | 317 | 349 | 381 | 413 | 445 | 477 | 509 |   |   |
| 0  | 1  | 1  | 1  | 1  | 30 | 62                 | 94 | 126 | 158 | 190 | 222 | 254 | 286 | 318 | 350 | 382 | 414 | 446 | 478 | 510 |   |   |
| 1  | 1  | 1  | 1  | 1  | 31 | 63                 | 95 | 127 | 159 | 191 | 223 | 255 | 287 | 319 | 351 | 383 | 415 | 447 | 479 | 511 |   |   |

1. 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, Please check if unit has been set up in slave mode, then set up in master mode.
2. 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.
3. In DMX mode operation, the laser is OFF and the DMX signal indicator is unlighted, please check as below.

Make sure to set up the DMX mode, make sure to have a good connection.
4. 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.
5. 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.

# ANIMATION LASER SHOW SYSTEM SAFETY NOTES

Thank you very much for choosing our product, for your safety, please read the laser safety instruction and this manual carefully before your operation.

This manual includes installation and user information. Please install and operate the laser according to the requirements of this manual and safety guidelines.

**DO NOT OVER DRIVE THE SCANNERS. WHEN USING MAX SPEED KEEP THE ANGLE SMALL. FOR MAX ANGLE DO NOT EXCEED 20000PPS ON THE ILDA SOFTWARE SETTING.**

# Class 3b and 4 Laser Lighting Effect User Safety Guide

## Important Warnings

Class 4 Lasers have the potential to harm eyesight if viewed directly in the face, and in many instances this may be the case even if viewed over longer distances of several tens of metres. Therefore before using the laser product you should familiarise yourself with its operation, and also the safety aspects that need to be considered.

Laser lighting effects are quite safe to watch if installed and used correctly, and being aware of a few basic factors will help you to achieve this. This guide has been prepared to help provide a basic background to the key safety aspects, and is based on current UK health and safety guidance on the use of lasers for public displays.

## Installation and Operation Notes

1. The laser should only be installed and operated by those that are aware of how to operate laser, and what the various controls perform.
2. The laser should be mounted in a suitable and secure position in the venue, so that once in position it is unlikely to be affected by unintended movement.
3. Prior to installation and operation of the laser, the paths of the beams and effects should be considered, particularly with respect to how they will touch the audience. If direct audience scanning is desired then the laser energy in the effects needs to be considered to decide if the effects are safe for direct viewing.

## Introduction

Laser lighting products are used to create some of the most vivid and striking visual effects, and are often noted for how they seem to produce solid shapes that cut through the air, and pick up highly defined swirling smoke patterns. The light that is used to create these stunning effects is different from normal light and therefore several precautions need to be taken when using lasers to ensure that the lighting effects are safe and enjoyable to view. The optical power output from the kind of lasers used for lighting displays can be harmful if not properly setup or is misused. But when used following the recommended health and safety guidelines, laser lighting effects no more harmful than looking at any conventional lighting effect.

Although this guide covers the main points to consider when using laser effects, users are advised to familiarise themselves with other guidance, particularly that issued by the Health and Safety Executive, HS(G)95 The Radiation Safety Of Lasers Used For Display Purposes  
A laser product that emits more than 5mW of light and less than 500mW can be classified as a Class 3B laser product

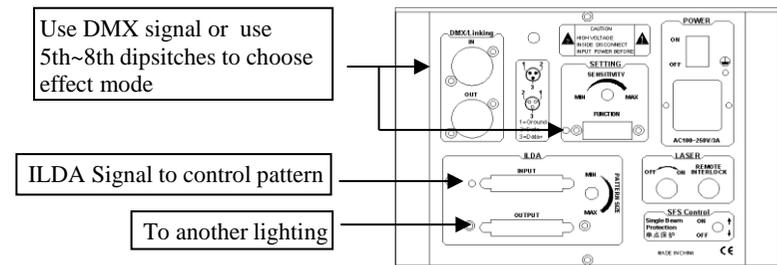
## Universal DMX Operation (DMX mode)

This mode allows you to use universal DMX-512 console to operate.

1. Install the units in a suitable position (laying or appending).
2. 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.
3. Assign a DMX address to each the unit using dipswitches, see the "DMX Address Quick Reference Char".
4. Turn on the all units' power, the units begins reset, then the unit begins working.
5. Use DMX console to control your units.

## PC Control Operation

1. This mode allows you to use PC software(for example: Pangolin, Phenix, Mamba) to operate. If no ILDA signal to DB25 jack in ILDA mode, the laser and scanner will be closed for protection. The scan speed of software control must be less than 35K PPS, otherwise, the patterns possible have distortion, or the scanner is protected possibly by built-in circuitry.
2. Use ILDA PC control to get customized laser patterns.
3. Use built-in program setting effect mode:
  - (1) Use DMX to choose effect mode( Animation effects, Animation grating multi-pattern effects, 3D dot effects, 3D plane effects);
  - (2) or use the 5th ~ 8th dipswitch to setting the effect mode



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.

One unit has 13 channels for DMX control, so each unit must be assigns 13 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=17, three loop address=33, four loop address=49

| Loop | Address | Binary    | Dipswitches                                |
|------|---------|-----------|--|
| 1    | 1       | 100000000 | # 1 (# 1 switch is ON, the others are OFF) |
| 3    | 17      | 100010000 | # 1+#5 (# 1 and #5 switches are ON)        |
| 3    | 33      | 100001000 | # 1+#6 (# 1 and #6 switches are ON)        |
| 4    | 49      | 100011000 | # 1+#5+#6 (# 1,5,6 switches are ON)        |

The dipswitches setting for DMX address see the " DMX Address Quick Reference Chart ".

## 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.

1. Install the units in a suitable position (laying or appending).
2. Set dipswitch to select Sound 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 audio 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.

### Master-Slave Operation

This mode will allow you to link up to many units together without controller.

1. Install the units in a suitable position (laying or appending).
2. Choose a unit to function as Master mode, set dipswitch to select Sound Active or AUTO mode. The others must be set to 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 units begins reset, then the unit begins working. The slave units will react the same as the master unit.
5. The units will react to the low frequencies of music via the internal microphone. Adjust the audio 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.

A laser product that emits more than 500mW of light and can be classified as a Class 4 laser product

Class 3B and 4 are safe if used responsibly, and in accordance with the relevant the guidance issued by the Health and Safety Executive.

Class 4 laser devices may cause fires and burn the skin if exposed directly.

In the simplest terms, generally keeping the beams and effects above the audience will not present a hazard to those viewing the show or effects. When you start to aim the laser effects down into the audience area is when it becomes harder to tell if the effects could cause harm. With a Class 3B and 4 laser lighting effect, the problem can arise if the beams or effects actually hit someone's face. If in doubt, keep the effects above the audience.

Class 3B and 4 laser devices can be harmful to eyesight if viewed directly. i.e. that is, the beam or effect strikes the face of a person directly. The actual injury that a Class 3B and 4 laser can cause depends upon a number of factors, including how long the laser beam enters the eye for, the intensity of light, and what part of the eye it actually gets focused onto. The most susceptible part of the eye to receive damage from a laser is the internal back wall of the eyeball, known as the retina. It is this part of the eye that receives the light signals that are sent to brain. All light entering the eye gets focused onto the retina.

There are no specific "laser laws" or any "laser licences" that anybody needs in order to own or operate a laser for lightshow use. However, there is specific guidance issued by the Health and Safety Executive in the form of a document called HS(G)95 The Radiation Safety of Lasers Used for Display Purposes. HS(G)95 outlines a number of detailed points to consider when using lasers for lightshow purposes.

Class 3B and 4 laser products are required to have several specific safety features as part of their design. These features are laid out in the British Standard on Laser Product Safety BS/EN 60825-1 and are a requirement of the product meeting CE approvals. The important ones are listed below:-

- 1) Laser Safety Warning Labels
- 2) Emissions Indicator
- 3) Remote Interlock Connector

## Audience Scanning

Audience Scanning is the term commonly used to describe when laser effects are being directly aimed at the viewing audience. This creates a very dramatic looking effect, as people can touch the light, and look down smoky tunnels. But because the laser light can touch or scan past people's faces, it also carries a risk that it could cause damage to people's eyesight, if they are overexposed to the laser light.

The amount of laser light that a person can be exposed to without it causing harm to eyesight is known as the Maximum Permissible Exposure or MPE. These levels are defined in the British Laser Safety Standard BS/EN 60826-1. When people are exposed to laser light which is above the MPE, it poses a risk of causing eye damage. This could be of concern when the laser effects are viewed directly in the face or there is a chance that they could be.

Knowing what the MPE and exposure level is for a given laser effect is quite a complex and involved process to establish. For it is dependant on a whole number of conditions and variables that need to be taken into account. The laser safety standard BS/EN 60825-1 contains the data required to calculate the safe levels, but it is not straightforward to interpret. Laser Safety Calculation Software has been developed to help ease the task of establishing laser effects exposure.

The BS/EN60825-1 Laser Safety Standard recommends that all establishments that use, or businesses that work with Class 3B laser products, should appoint a Laser Safety Officer (LSO). The Laser Safety Officer should be aware of the safety issues when using lasers, and is responsible for overseeing how the laser is used. In smaller businesses, the LSO will probably also be the installer, operator, owner etc.

Health and Safety guidance states that for supervised installations laser light above the Maximum Permissible Exposure (MPE) should not be accessible to members of the audience. It also recommends the area where the MPE may not be exceeded, extends from 3m above, and 2.5m laterally from any location in the venue where members of the public may gain access during the display. The following diagrams illustrate this.

The worst case effect to look at directly is a static single beam, because all the light energy is concentrated into one point.

| Channel | Function     | Value   | Description                              |
|---------|--------------|---------|--|
| CH11    | Pattern Size | 0~255   | 0 is Moderate, 1 is small, 255 is big    |
| CH12    | Display Dot  | 0~255   | 0 is display dot, 255 is best brightness |
| CH13    | Drawing      | 0~127   | Auto drawing mode 1                      |
|         |              | 128~255 | Auto drawing mode 2                      |

## Function setting

If it is set to ILDA mode (use PC software to control laser light), just need to connect ILDA signal to DB25 jack. If set to Built-in program, then ILDA signal cannot be connected, setting dipswitches directly is ok. ILDA mode (PC control) and Built-in program mode can be identified and transisted automatically.

0=OFF 1=ON X=OFF or ON

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

0: Multicolor effects 1: Single color/white effects

| #5 | #6 | #7 | #8 | EFFECT MODE             |
|----|----|----|----|-------------------------|
| 0  | 0  | 0  | 0  | MULTI-EFFECT            |
| 1  | 0  | 0  | 0  | NORMAL ANIMATION EFFECT |
| X  | 1  | 0  | 0  | MULTI-PATTERN EFFECT    |
| X  | X  | 1  | 0  | 3D DOT EFFECT           |
| X  | X  | X  | 1  | 3D PLANE EFFECT         |

## Built-In Program Function Chart

### DMX address calculation

For DMX mode, DMX 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      | DMX, Set to "1" |

## DMX Control

The system only accepts the DMX512 signal of international standard to control the system.

DMX Control Parameter Chart

| Channel | Function       | Value   | Description  |
|---------|----------------|---------|--|
| CH1     | Mode           | 0~63    | Sound Active mode, only CH2 work   |
|         |                | 64~127  | Auto mode, only CH2 work   |
|         |                | 128~191 | Manual mode to Sound Active run  |
|         |                | 192~255 | Manual mode to Auto run  |
| CH2     | Effect Mode    | 0~49    | Blanking   |
|         |                | 50~99   | Multi-pattern effect   |
|         |                | 100~149 | 3D dot effect  |
|         |                | 150~199 | 3D plane effect  |
|         |                | 200~255 | Normal animation effect  |
| CH3     | Dimmer         | 0~255   | white~red~yellow~green~blue~purple~fixed color~random single color~random seven-color~moving seven-color~fixed color |
| CH4     | Pattern Select | 0~255   | 128 patterns   |
| CH5     | Moving-Y       | 0~127   | Manual to up to down moving  |
|         |                | 128~191 | Auto to down moving  |
|         |                | 192~255 | Auto to up moving  |
| CH6     | Moving-X       | 0~127   | Manual to left to right moving   |
|         |                | 128~191 | Auto to right moving   |
|         |                | 192~255 | Auto to left moving  |
| CH7     | Rolling-Y      | 0~127   | Manual rolling   |
|         |                | 128~255 | Auto rolling   |
| CH8     | Rolling-X      | 0~127   | Manual rolling   |
|         |                | 128~255 | Auto rolling   |
| CH9     | Rotation       | 0~127   | Manual rotation  |
|         |                | 128~191 | Auto clockwise rotation  |
|         |                | 192~255 | Auto counter clockwise rotation  |
| CH10    | Zoom(+/-)      | 0~85    | Auto zoom(+)   |
|         |                | 86~170  | Auto zoom(-)   |
|         |                | 171~255 | Manual zoom(+/-)   |

## General instructions

### Unpacking:

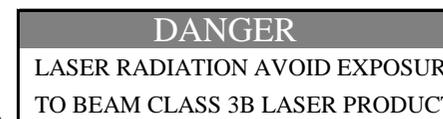
Thank you for purchasing this product. Please read user guide for safety and operations information before using the product. Keep this manual for future reference. This product can create perfect laser programs and effects since it has passed a series of strictly tests before delivery. Please check 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. DMX Cable:   | 1PCS |
| 4. User Guide:  | 1PCS |

### Notice:

1. Do not exposure the human eye direct to laser beam.
2. Do not turn on and off the unit frequently.
3. Before using this unit make sure the power supply is ground.
4. 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°C, do not use this continuously over 4 hours, otherwise it shortens the lifetime of the unit.
5. Use cleaning tissue to remove the dust absorbed 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 can cause fire or electric shock and damage your unit, and will void your manufactures warranty.



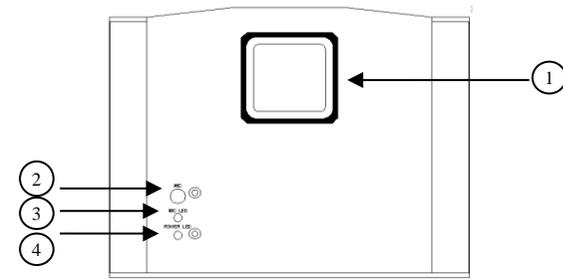
## Technical Specification

1. Voltage: AC100~250V, 50HZ/60HZ, Fuse 3A/250V
2. Rated Power: 100W
3. Scanner: 25K High-speed optical scanner, ±20° big angle scanning
4. Laser: RGB analog laser module, 10KHZ frequency
  - AU10RGB: 100mW red laser(635nm), 100mW green laser(532nm)  
400mW blue laser(450nm), mixed 500mW white laser
  - AU20RGB: 200mW red laser(635nm), 200mW green laser(532nm)  
600mW blue laser(450nm), mixed 1000mW white laser
  - AU30RGB: 300mW red laser(635nm), 300mW green laser(532nm)  
1000mW blue laser(450nm), mixed 1000mW white laser
5. Working Modes: ILDA mode(PC Control), DMX512 (13 CH), Sound Active, AUTO-Beam, AUTO-Animation, Master/Slave, RGB color or only white color setting
6. Effects Modes: Animation effects, Animation grating multi-pattern effects, 3D dot effects, 3D plane effects
7. Safety Configure: Laser key switch, laser remote interlock, flying rings bolt
  - SFS Control: scanner fail safety control ON/OFF,
8. Interface: 3 pins XLR jack for DMX or Maser-Slave linking  
DB25/M ILDA computer interface for PC control
9. Size: 190\*250\*155mm
10. Weight: 4.8/ 5.1/ 5.3Kg

## Features

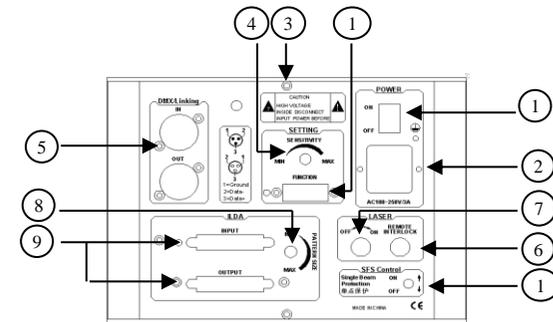
1. Full-color animation laser with high-speed optical scanner to create animated graphics, 128 beam show and graphics show patterns, and with the function of unique blanking, frequently flashing, rotating, moving, rotation, split, zoom, drawing, speed and color etc.
2. 4 in 1 multi-effects RGB animation laser made of 635nm red laser
3. Compatible ILDA laser show software with ILDA interface. Use electronic switches to conversion full ILDA signal. The unit will shut off if no ILDA signal.
4. Smaller designs;easy for hanging install;save delivery costs.

## Front/Rear Panel



Front Panel Figure

- |                                |                            |
|--------------------------------|----------------------------|
| 1. Laser aperture              | 2. Sound active microphone |
| 3. Sound active indicator:Blue | 4. Power indicator:Red     |



Rear Panel Figure

- |   |                        |                                  |
|---|------------------------|----------------------------------|
| 1. Power switch   | 2. Power jack          | 3. Flying rings bolt             |
| 4. Audio sensitivity knob                               | 5. DMX or linking jack | 6. Laser remote interlock        |
| 7. Laser key switch                                     | 8. Pattern size knob   | 9. ILDA interface with DB25 jack |
| 10. Function of built-in program setting dipperswitches |                        |                                  |
| 11. SFS Control: scanner fail safety control ON/OFF     |                        |                                  |

## 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.

### AUTO

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















