



LASER WITH DMX/ILDA



Ref.: SCAN500RGB/SCAN1100RGB/SCAN2000RGB/SCAN1100PINK

USER MANUAL MODE D'EMPLOI

Imported from China by

LOTRONIC SA – Avenue Zénobe Gramme 9 – 1480 Saintes - Belgium



LASER FOR PROFESSIONAL USE ONLY

This laser complies with the international standards EN60825-1:2014. It is meant **exclusively for professional use**.

Its installation and use should only be carried out by a skilled technician who is aware of the specific dangers of lasers.

**REMINDER OF SAFETY INSTRUCTIONS**

Lasers of class 3 and 4 are for outdoor use only.

Inside the public area, any laser shooting towards the audience is strictly forbidden except if a safety area of 5 m radius is marked around the area to which the audience cannot get access.

The area called “public area” is defined by the space of 3m above the area occupied by the audience and a width of 2.5m around this area. The public area must be clearly identified by signs on the ground.

Inside the public area only a scanning movement is allowed within the terms and conditions defined by the international technical laser safety report.

The laser unit must be installed out of reach of the audience and at a minimum of 3m above the ground where the audience is present or protected by a safety perimeter of 5m radius.

The laser unit must be installed in such a way that it can't be moved under the effect of disruptions such as crowd movements, vibrations or gusts of wind.

Safety Instructions

Please read these instructions carefully, they include important information about the installation, usage and maintenance of this product.

- Please keep this User Guide for future reference. If you sell the unit to another user, be sure that he also receives this instruction booklet.
- Always make sure that you are connecting to the proper voltage, and that the line voltage you are connecting to is not higher than that stated on the decal or rear panel of the fixture.
- This product is intended for indoor use only!
- To prevent risk of fire or shock, do not expose fixture to rain or moisture. Make sure there are no flammable materials close to the unit while operating.
- The unit must be installed in a location with adequate ventilation, at least 20in (50cm) from adjacent surfaces. Be sure that no ventilation slots are blocked.
- Always disconnect from power source before servicing or replacing fuse and be sure to replace with same fuse size and type.
- Secure fixture to fastening device using a safety chain. Never carry the fixture solely by its head. Use its carrying handles.
- Maximum ambient temperature (Ta) is 104° F (40°C). Do not operate the fixture at temperatures higher than this.
- In the event of a 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 center. Always use the same type of spare parts.
- Don't connect the device to a dimmer pack.
- Make sure the power cord is never crimped or damaged.
- Never disconnect the power cord by pulling or tugging on the cord.
- Avoid direct eye exposure to the light source while it is on.

DISCONNECT DEVICE: Where the MAINS plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.

LASER EMISSION DATA

* As measured under IEC measurement conditions for classification.

| | |
|-------------------------|---------------------------|
| Laser Classification | Class 3B |
| Green Laser Medium | DPSS 532nm |
| Red Laser Medium | LD GaAlAs 638nm, typical |
| Blue Laser Medium | LD InGaN 445nm, typical |
| Beam Diameter | <3mm at aperture |
| Divergence(each beam) | <1.3 mrad |
| Divergence(total light) | <1.3mrad |
| Transverse Beam Mode | TEM ₀₀ |
| Cooling | TEC & Fan Cooling |
| Scanning | High speed scanner 25kpps |

Laser Power :

SCAN500RGB : 100mW-G-532nm+200mW-R-650nm+200mW-B-445nm

SCAN1100RGB: 200mW-G-532nm+300mW-R-638nm+600mW-B-445nm

SCAN2000 RGB: 500mW-G-532nm+500mW-R-638nm+1000mW-B-445nm

SCAN1100PINK: 500mW-R-638nm+600mW-B-445nm

Specification:

Mains Input: AC100~240V, 50/60Hz, total 30W

Fuse: 250V 2A slow blow (20mm glass)

Menu mode: Auto, music, DMX512, Master/slave, ILDA, IRC

Laser Classification: Class 3B

Laser Safety Standard: EN60825-1:2014

Condition Temperature: 10°C~40°C

DMX channels.....5 / 34 channels

Dimensions.....246 x 211 x 105mm

Weight: 3.5kg

Installation

The unit should be mounted via its screw holes on the bracket. 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 and able to support a weight of 10 times of the unit's weight. Also always use a safety cable that can hold 12 times the weight of the unit when installing the fixture.

DMX512

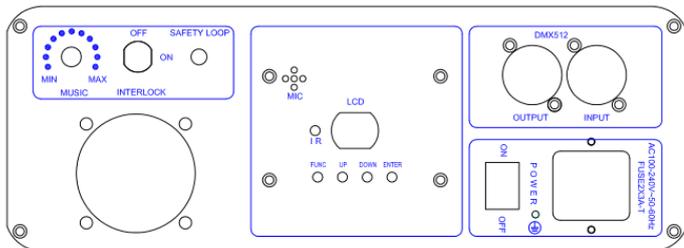
1. Install the units in a suitable position (laying or appending).
2. Use standard XLR microphone cable chain your units together via the XLR connector on the rear of the units. For longer cable runs we suggest a terminator at the last fixture.
3. Assign a DMX address to each the unit.

4. Turn on all units' power, the units begins reset, then the unit begins working.
5. Use DMX console to control your units.

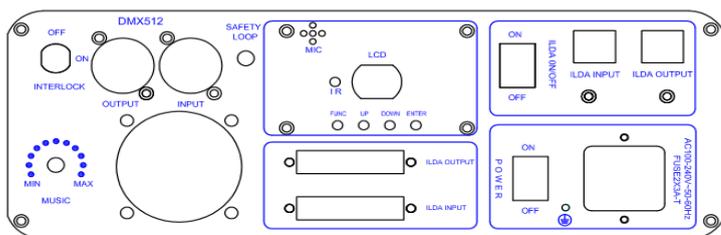


Operating introduction :

1. Built-in performance programs, AUTO, SOUND
2. DMX mode
3. Master/Slave



4. ILDA DB25 mode



Operation :

- FUNC** Mode/Function: Set the operating mode of laser.
- ENTER** Confirmation: Confirms all settings or changes of LED control panel.
- UP**
- DOWN** UP/DOWN: Changes the operating mode, parameter or DMX address.

Operation description:

Set the function overview:

* [FUNCTION] key:

At every short press on the FUNC button, following actions are active :

- INDR - DMX (5-CH simplified DMX mode) + you can set the DMX address via the UP/DOWN buttons and confirm with ENTER
- DMX (34-CH advanced DMX mode) + you can set the DMX address via the UP/DOWN buttons and confirm with ENTER
- INDR SE (1 – 2 – 3) = 3 AUTO or sound-controlled mode. The ENTER button toggles between these 2 modes (SND is displayed)

The SE 1 sequence (beam/tunnels, waves mode) – SE 2 (animation 1) – SE 3 is accessible via the sub-menu.

To access the sub menu keep the FUNC button pressed for at least 3 seconds. SET is displayed on the bottom right side of the display. You are now in the setting menu.

Select the sequence by selecting SE and press ENTER.

This sub-menu also allows to (not recommended for beginners!)

- Configure motors X & Y via dr – X and dr – Y
- Invert motors (SWAP XY)
- Set the projection size (X-SIZ with values from 0 to 100 and Y-SIZE with values from 0 to 100)
- Activate/deactivate the remote control (REMOTE – ON/OFF)

To leave the menu, keep FUNC pressed.

*** Overview of playback modes:**

There are multiple playback modes:

- Built-in Master mode: divided into three small playback modes.

>1: mixed playback: Drawing scenes from each sequence in taking turn playback (can be set by setting the function).

>2: Sequence playback: only play a sequence. (This mode for the temporary mode, restart laser will not automatically enter)

>3: Scene playback: only play a scene. This mode for the temporary mode, restart laser will not automatically enter)

- Slave mode: divided into the following two slave modes:

>1: DMX slave mode: Through the DMX signal line to follow the Master to play.

>2: ILDA slave mode: Accept the ILDA signal control from the Master or laser console.

- DMX playback mode:

>1: Easy DMX mode: 5 channels

Note: Simple DMX mode takes the built-in scenes of the laser directly without any further settings.

| CHANNEL | DMX value | DESCRIPTION |
|---------------------------------|-----------|---|
| CH 1 On/off power | 0 | OFF |
| | 1-255 | ON |
| CH2 Act auto/sound | 0-127 | AUTO |
| | 128-255 | SOUND CONTROLLED |
| CH3 Gallery Menu (scenes) | 0-15 | 1 gallery (0) |
| | 16-31 | 2 gallery (16) |
| | 32-239 | 3 gallery (32) |
| | 240-255 | 40 gallery (240) |
| CH4 Scenes | 0-255 | Each value corresponds to a pattern, the value exceeds the number of patterns, the system with the largest number instead |
| CH5 colors | 0-31 | RGB |
| | 32-63 | red |
| | 64-95 | yellow |
| | 96-127 | green |
| | 128-159 | blueviolet |
| | 160-191 | blue |
| | 191-223 | purple |
| 224-255 | white | |

>2:Professional DMX mode: 34 channels

Order 1: Professional DMX mode is available to the experienced lighting engineers, who are professional in DMX control, as well as the laser pattern scanning principle , if not, pls use simple DMX mode 4 channels

Order 2: DQF6 (the Bluetooth number) is a double-pattern laser system, and two patterns can be scanned at the same time. The following description is distinguished by pattern A and pattern B. For ease view, the following points are shown in Table 1 and Table 2 respectively below.

Table 1 (PATTERN A):

Note:Table 1: CH1-Ch17,pattern A's channel function, except for special instructions, only control the pattern A, pattern B is not controlled by this 17 channels:

| CHANNEL | DMX value | DESCRIPTION |
|---------------------------------------|-----------|--|
| CH 1 On/off power | 0 | OFF |
| | 1-99 | ON |
| | 100-199 | AUTO |
| | 200-254 | retain |
| | 255 | Pattern A closed light, pattern B output light |
| CH2 Out of bounds and pattern size | 0-49 | Out of bounds |
| | 50-99 | Reentry |
| | 100-149 | blanking |
| | 150-199 | Blanking+ pattern enlarge |
| | 200-255 | retain |
| CH3 Gallery Menu (sences) | 0-15 | 1 gallery (0) |
| | 16-31 | 2 gallery (16) |
| | 32-239 | 3 gallery (32) |
| | 240-255 | 40 gallery (240) |
| CH4 Gallery choose | 0-255 | Each value corresponds to a pattern, when the value exceeds the number of patterns, the system uses the largest number |
| CH5 Patterns zooming | 0 | No zooming |
| | 1-31 | Zooming 1 |
| | 32-63 | Zooming 2 |
| | 64-95 | Zooming3 |
| | 96-127 | Zooming4 |
| | 128-159 | Zooming 5 |
| | 160-191 | Zooming 6 |
| | 192-223 | Zooming 7 |
| | 224-255 | Zooming8 |
| CH6 Patterns rotating | 0-63 | Manual rotating |
| | 64-95 | Rotating 1 |
| | 96-127 | Rotating 2 |
| | 128-159 | Rotating 3 |
| | 160-191 | Rotating 4 |
| | 192-223 | Rotating 5 |
| | 224-255 | Rotating 6 |
| CH7 Horizontal moving | 0-63 | Manual moving |
| | 64-95 | Horizontal 1 |
| | 96-127 | Horizontal 2 |

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|-------------------------------------|-----------------------|---|
| | 128-159 | Horizontal 3 |
| | 160-191 | Horizontal 4 |
| | 192-223 | Horizontal 5 |
| | 224-255 | Horizontal 6 |
| CH8 Vertical moving | 0-63 | Manual moving |
| | 64-95 | vertical 1 |
| | 96-127 | vertical 2 |
| | 128-159 | vertical 3 |
| | 160-191 | vertical 4 |
| | 192-223 | vertical 5 |
| | 224-255 | vertical 6 |
| CH9 X axis Horizontal zooming | 0-63 | Manual X zooming |
| | 64-95 | X zooming 1 |
| | 96-127 | X zooming 2 |
| | 128-159 | X zooming 3 |
| | 160-191 | X zooming 4 |
| | 192-223 | X zooming 5 |
| | 224-255 | X zooming 6 |
| CH10 Y axis vertical zooming | 0-63 | Manual Y zooming |
| | 64-95 | Y zooming 1 |
| | 96-127 | Y zooming 2 |
| | 128-159 | Y zooming 3 |
| | 160-191 | Y zooming 4 |
| | 192-223 | Y zooming 5 |
| | 224-255 | Y zooming 6 |
| CH11 Force Segmentation Color | 0 | Patterns original colors |
| | 1-255 | The length of the segmented colors |
| CH12 Patterns discolor | 0-7 | original |
| | 8-15 | red |
| | 16-23 | yellow |
| | 24-31 | green |
| | 32-39 | blueviolet |
| | 40-47 | blue |
| | 48-55 | purple |
| | 56-63 | white |
| | 64-95 | Red/green/blue discolor |
| | 96-127 | Blueviolet/blue/purple discolor |
| | 128-159 | 7 colors discolor |
| | 160-191 | RGB discolor |
| | 192-223 | Positive walking color |
| 224-255 | Reverse walking color | |
| CH13 Node and blanking control | 0-63 | Normal blanking control |
| | 64-127 | Patterns without blanking, flyback line banking |
| | 128-159 | Patterns and line without blanking |
| | 160-255 | retain |
| CH14 | 0-63(CH15) | Manual gradually drawing |

| | | |
|---|----------------------|--|
| The auxiliary function of the drawing control (used in conjunction with CH15) | 64-127/160-191(CH15) | The moving time of the pattern drawing gradually |
| | 192-255 | The number of nodes that are drawn |
| CH15 Progressive control [CH15 must be used in conjunction with CH14] | 0-31 | Forward hand-drawn gradually |
| | 32-63 | Reverse manual drawing |
| | 64-95 | Extended drawing |
| | 96-127 | Contraction drawing |
| | 128-159 | Both ends are zoomed at the same time |
| | 160-191 | Head and tail were zooming |
| | 192-223 | Walking drawing |
| | 224-255 | Turn over drawing |
| CH16 Auxiliary control of twist deformation effect channel | 0-255 | 0-255, the greater the value, the smaller the distortion. [Note: CH16 can control the degree of twist of the twist effect when zooming, rotating, moving, and twisting effects] |
| CH17 Grating selection and projection amplitude control | 0-255 | [0-19,grating 1] [20-39,grating 2].....[220-239,grating 12] [240-255,grating 13] Note: In each paragraph, the larger the value, the smaller the projection range |

Table 2 (PATTERN B):

Note: Table 2: CH18-CH34, pattern B's channel function, except for special instructions, only control the pattern B, pattern A is not controlled by these 17 channels.

In order to simplify the operation, the functions correspond to pattern A, only special green parts are different.

| CHANNEL | DMX value | DESCRIPTION |
|--|-----------|--|
| CH 18 On/off power | 0 | off working |
| | 1-99 | Act auto |
| | 100-199 | Act sound |
| | 200-254 | retain |
| | 255 | Pattern A closed light, pattern B output light |
| CH19 Out of bounds and pattern size | 0-49 | Out of bounds |
| | 50-99 | Reentry |
| | 100-149 | blanking |
| | 150-255 | retain |
| CH20 The distribution angle of each unit of the array | 0-99 | the smaller the value of the segment, the larger the angular distribution of each unit, the gap is a positive gap |
| | 100-199 | the smaller the value of the segment, the larger the angle distribution of each unit, the gap is the negative gap |
| | 200-255 | retain |
| CH21 Gallery choose | 0-255 | Each value corresponds to a pattern, when the value exceeds the number of patterns, the system uses the largest number |
| CH22 Patterns zooming | 0 | No zooming |
| | 1-31 | Zooming 1 |
| | 32-63 | Zooming 2 |

| | | |
|--------------------------------------|---------|------------------------------------|
| | 64-95 | Zooming3 |
| | 96-127 | Zooming4 |
| | 128-159 | Zooming 5 |
| | 160-191 | Zooming 6 |
| | 192-223 | Zooming 7 |
| | 224-255 | Zooming8 |
| CH23 Patterns rotating | 0-63 | Manual rotating |
| | 64-95 | Rotating 1 |
| | 96-127 | Rotating 2 |
| | 128-159 | Rotating 3 |
| | 160-191 | Rotating 4 |
| | 192-223 | Rotating 5 |
| | 224-255 | Rotating 6 |
| CH24 Horizontal moving | 0-63 | Manual moving |
| | 64-95 | Horizontal 1 |
| | 96-127 | Horizontal 2 |
| | 128-159 | Horizontal 3 |
| | 160-191 | Horizontal 4 |
| | 192-223 | Horizontal 5 |
| | 224-255 | Horizontal 6 |
| CH25 Vertical moving | 0-63 | Manual moving |
| | 64-95 | vertical 1 |
| | 96-127 | vertical 2 |
| | 128-159 | vertical 3 |
| | 160-191 | vertical 4 |
| | 192-223 | vertical 5 |
| | 224-255 | vertical 6 |
| CH26 X axis Horizontal zooming | 0-63 | Manual X zooming |
| | 64-95 | X zooming 1 |
| | 96-127 | X zooming 2 |
| | 128-159 | X zooming 3 |
| | 160-191 | X zooming 4 |
| | 192-223 | X zooming 5 |
| | 224-255 | X zooming 6 |
| CH27 Y axis vertical zooming | 0-63 | Manual Y zooming |
| | 64-95 | Y zooming 1 |
| | 96-127 | Y zooming 2 |
| | 128-159 | Y zooming 3 |
| | 160-191 | Y zooming 4 |
| | 192-223 | Y zooming 5 |
| | 224-255 | Y zooming 6 |
| CH28 Force Segmentation Color | 0 | Patterns original colors |
| | 1-255 | The length of the segmented colors |
| CH29 Patterns discolor | 0-7 | original |
| | 8-15 | red |
| | 16-23 | yellow |
| | 24-31 | green |

| | | |
|--|----------------------|---|
| | 32-39 | blueviolut |
| | 40-47 | blue |
| | 48-55 | purple |
| | 56-63 | white |
| | 64-95 | Red/green/blue discolor |
| | 96-127 | Blueviolut/blue/purple discolor |
| | 128-159 | 7 colors discolor |
| | 160-191 | RGB discolor |
| | 192-223 | Positive walking color |
| | 224-255 | Reverse walking color |
| CH30 Node and blanking control Array control | 0-63 | Normal blanking control |
| | 64-127 | Patterns without blanking, flyback line banking |
| | 128-159 | Patterns and line without blanking |
| | 160-191 | Pattern A anchored in an array pattern of pattern B, pattern color setting same with A |
| | 192-255 | Pattern A anchored in an array pattern of pattern B, pattern color setting same with B |
| CH31 The auxiliary function of the drawing control (used in conjunction with CH32) | 0-63(CH32) | Manual gradually drawing |
| | 64-127/160-191(CH32) | The moving time of the pattern drawing gradually |
| | 192-255 (CH32) | The number of nodes that are drawn |
| CH32 Progressive control [CH32 must be used in conjunction with CH31] When the pattern A is voice-activated, the CH32 action will also become a voice-activated state | 0-31 | Forward hand-drawn gradually |
| | 32-63 | Reverse manual drawing |
| | 64-95 | Extended drawing |
| | 96-127 | Contraction drawing |
| | 128-159 | Both ends are zoomed at the same time |
| | 160-191 | Head and tail were zooming |
| | 192-223 | Walking drawing |
| | 224-255 | Turn over drawing |
| CH33 Auxiliary control of twist deformation effect channel | 0-255 | 0-255, the greater the value, the smaller the distortion. [Note: CH33 can control the degree of twist of the twist effect when zooming, rotating, moving, and twisting effects] |
| CH34 projection amplitude control | 0-255 | (0-19),(20-39).....(220-239) , (240-239),(240-255) Note: In each paragraph, the larger the value, the smaller the projection range |

>3: ILDA console mode: ILDA signal input, output ILDA effect.

* Effects library: Each effect library is stored as a sequence on the motherboard, they are:

- 1: Geometric sequence (Gypsophalange filter);
- 2: wedding theme sequence;
- 3: Christmas theme sequence;
- 4: beam sequence (no filter);
- 5: Geometric sequence (Galaxy Nebula);
- 6: 3D sequence (3D filter);
- 7: point circle sequence (dot circle filter);
- 8: long virtual point sequence (long virtual point filter);

LED display instruction:

- * {INTR}{DMX}{APP}{SET}{SND}{SEL} for status identification.
 - {INTR} Indicates that the fixture is using the built-in effect. When the status flag is lit (INTR) alone, it is the built-in effect play mode.
 - {DMX} indicates that the fixture is controlled by the DMX signal. The status flag is only bright (DMX) for the standard DMX control mode
 - {INTR} {DMX} is a simple DMX mode that calls the built-in scenario via DMX signals.
 - {SET} indicates that the fixture is in the system setup state.
 - {SND} indicates that the motion of the pattern is controlled by the sound when the fixture is in the built-in mode.
 - {SEL} In the set state, the indicator is lit to indicate that the current setting option is enabled.
 - * {INTR} the state of the digital display section.
 - {AL} indicates the mix mode in the built-in mode (the scene play is extracted from each sequence).
 - {P ###} Indicates the scene playback mode when the built-in mode is displayed. The displayed value is the scene number.
 - {SE ##} indicates the sequence playback mode when the built-in mode is displayed, and the displayed value is the sequence number.
 - * DMX} the digital display part state.
 - * {INTR} + {DMX}the digital display part state.
 - {A ###} Indicates the DMX address code for the fixture.
 - * {SET} the digital display part state.
 - {SE ##} Indicates whether the digital display sequence is selected when the mixed mode of the built-in mode is used.
- (Note: {SEL} status flag indicates whether the sequence is selected.)
- {DR- | |} indicates the X mirror setting.
 - {DR- =} represents the Y mirror setting.
 - {DR- = | |} represents XY offset.
 - {x ###} represents the X projection amplitude, the digital part is the full scale percentage value
- (Note: {SEL} can be adjusted through the button on the board).
- {y ###} denotes the Y projection amplitude (Note: same as above).
 - {rOFF} Indicates whether or not the remote control function is turned off.
- The virtual remote control of the mobile phone APP is the same as that described in the previous section.
- * Extinguished: After a few hours of no operation, the digital part of the display will go out (Note: the screen function with the specific model, some models do not have the function)

Remote control mode:

- * [INTR] key: Enter the mix mode built-in.
- * [DMX] key: Professional DMX mode.
- * [E-DMX] key: easy DMX mode.
- * [1-9] key: digital number from 1 to 9
- In the built-in mix mode, press the [1-9] button to enter the scene playback mode. The number entered is the scene
- When the built-in sequence is played, press the [1-9] button to select the serial number.
- In DMX mode or E- DMX mode, press the digital button to set the address code.
- In the setting mode, you can select the projection range when setting the projection angle.
- * [+] [-] key:
 - In the scene playback mode, press this key to adjust the scene number.
 - Press this key to adjust the serial number in the sequence play mode.



- In DMX or E- DMX mode, press this key to adjust the address code.
- When setting mode, press this key to adjust the setting item.

* [SET]key:

- When the system is not in the set state, press 5 times to enter the system setting state.
- When the system is in the setting state, press this key to exit the system setting state.

* [RGB] key:

- Press this key to toggle the pattern color. When the color is changed, the display will temporarily display the currently set color.

- This setting is set to temporary, and the system will return to the color state (CLR) after the shutdown is restarted.

* [SEQ] key: Press this key to enter the sequence playback mode in built-in mode.

* [B-Out] key: Press this key to turn off the laser output.

* [Sound] key:

- In the built-in mode, press this key to set or cancel the voice.

- When setting a mixed sequence, you can select or cancel a sequence.

- You can select or cancel the mirror when setting the graphic X mirror, the graphic Y mirror, and the XY for the graphic.

- You can select or cancel the remote control when setting the remote control function.

* [ENTER] key: When entering a number, the value to be entered is less than 100, press this key to speed up the digital input.



IMPORTANT NOTE: Electric products must not be put into household waste. Please bring them to a recycling centre. Ask your local authorities or your dealer about the way to proceed.



LASER A USAGE EXCLUSIVEMENT PROFESSIONNEL

Ce laser est conforme aux normes EN60825-1:2014, il est à usage exclusivement professionnel,

Son installation et utilisation doit être effectuée exclusivement par un technicien compétent et formé aux risques spécifiques des lasers.



RAPPEL DES PRECAUTIONS DE SECURITE

Les appareils à lasers de classe 3 et 4, sont utilisables exclusivement en plein air

A l'intérieur de la zone réservée au public, aucun " tir laser " n'est admis en direction du public, quelle que soit la classe du laser, sauf si un périmètre d'exclusion du public de 5 mètres de rayon, matérialisé, est mis en place.

La zone dite " zone réservée au public " est définie par l'espace situé jusqu'à 3 mètres au-dessus de la surface occupée par le public et sur une bande de 2, 5 mètres autour de cette dernière. La zone réservée au public est matérialisée au sol.

Dans la zone réservée au public, seul est admis un rayonnement par balayage effectué dans les conditions fixées par le rapport technique international sur la sécurité des appareils à laser

L'appareil à laser est hors de portée du public et au minimum à 3 mètres au-dessus du sol accessible au public ou protégé par un périmètre de sécurité de 5 mètres de rayon.

L'appareil laser doit être fixé/posé de telle manière qu'il ne puisse pas être déplacé sous l'effet de perturbations telles que des mouvements de foule, des vibrations ou des rafales de vent.

Consignes de sécurité

Lisez attentivement ce manuel qui contient des informations importantes sur l'installation, l'utilisation et l'entretien de cet appareil.

- Conservez le manuel pour référence ultérieure. Si l'appareil change un jour de propriétaire, assurez-vous que le nouvel utilisateur est en possession du manuel.
- Assurez-vous que la tension secteur convient à cet appareil et qu'elle ne dépasse pas la tension d'alimentation indiqué sur la plaque signalétique de l'appareil.
- Uniquement pour utilisation à l'intérieur!
- Afin d'éviter tout risque d'incendie ou de choc électrique, ne pas exposer cet appareil à la pluie ou à l'humidité. Assurez-vous qu'aucun objet inflammable ne se trouve à proximité de l'appareil pendant son fonctionnement.
- Installez l'appareil à un endroit bien ventilé à une distance minimum de 50cm de toute surface. Assurez-vous que les fentes de ventilation ne sont pas bloquées.
- Débranchez l'appareil du secteur avant toute manipulation ou entretien. Lorsque vous remplacez le fusible, utilisez uniquement un fusible qui présente exactement les mêmes caractéristiques que l'ancien.
- La température ambiante ne doit pas dépasser 40°C. Ne pas faire fonctionner l'appareil à des températures supérieures.
- En cas de dysfonctionnement, arrêtez immédiatement l'appareil. N'essayez jamais de réparer l'appareil par vous-même. Une réparation mal faite peut entraîner des dommages et des dysfonctionnements. Contactez un service technique agréé. Utilisez uniquement des pièces détachées identiques aux pièces d'origine.
- Ne pas brancher l'appareil sur un variateur.
- Assurez-vous que le cordon d'alimentation n'est jamais écrasé ni endommagé.
- Ne pas exposer vos yeux à la source lumineuse.
- Lorsque le cordon d'alimentation ou un coupleur d'appareil est utilisé comme dispositif de déconnexion, ce dispositif doit rester facilement accessible;
Si un interrupteur omnipolaire est utilisé comme dispositif de déconnexion, l'emplacement sur l'appareil et la fonction de l'interrupteur doit être décrite, et le commutateur doit rester facilement accessible

LASER EMISSION DATA

* As measured under IEC measurement conditions for classification.

| | |
|---------------------------|------------------------------|
| Classification Laser | Classe 3B |
| Laser vert | DPSS 532nm |
| Laser rouge | LD GaAlAs 638nm, typique |
| Laser Bleu | LD InGaN 445nm, typique |
| Diamètre du rayon | <3mm à la sortie |
| Divergence (chaque rayon) | <1.3 mrad |
| Divergence (total) | <1.3mrad |
| Transverse Beam Mode | TEM ₀₀ |
| Refroidissement | TEC & ventilateur |
| Balayage | Scanner haute vitesse 25kpps |

Puissance des lasers

SCAN500RGB : 100mW-G-532nm+200mW-R-650nm+200mW-B-445nm

SCAN1100RGB: 200mW-G-532nm+300mW-R-638nm+600mW-B-445nm

SCAN2000 RGB: 500mW-G-532nm+500mW-R-638nm+1000mW-B-445nm

SCAN1100PINK: 500mW-R-638nm+600mW-B-445nm

Caractéristiques techniques:

| | |
|-----------------------------|---|
| Alimentation..... | AC100-240V, 50/60Hz |
| Fusible | 250V 2 A lent (verre 20mm) |
| Modes: | Auto, musique, DMX512, Master/slave, ILDA, télécommande |
| Laser Classification: | Class 3B |
| Laser Safety Standard:..... | EN60825-1:2014 |
| Condition Temperature:..... | 10°C~40°C |
| Canaux DMX..... | 5 / 34 canaux |
| Dimensions..... | 246 x 211 x 105mm |
| Poids:..... | 3.5kg |

Montage

Fixez l'appareil sur l'étrier au moyen des trous de vis. Assurez-vous que l'appareil est solidement fixé afin d'éviter des vibrations et des mouvements pendant le fonctionnement. Vérifiez que le support sur lequel vous allez installer l'appareil est solide et capable de supporter au moins 10 fois le poids de l'appareil. Lors de l'installation utilisez toujours un câble de sécurité supplémentaire qui peut porter 12 fois le poids de l'appareil.

DMX512

1. Installez les appareils dans une position appropriée (couché ou suspendu).
2. Reliez les appareils avec un câble XLR standard de microphone par les connecteurs XLR au dos. En cas de chaînes plus longues, nous recommandons l'emploi d'une résistance de fin de ligne sur le dernier appareil. U
3. Affectez une adresse DMX à chaque appareil.
4. Mettez tous les appareils sous tension. Ils effectuent d'abord un reset et sont ensuite opérationnels.
5. Commandez les appareils avec une console DMX.



Description:

Fonction de réglage:

Chaque pression courte sur le bouton FUNC effectue les actions suivantes :

- INDR - DMX (mode dmx simplifié 5 canaux) + possibilité de réglage de l'adresse DMX via les boutons UP / DOWN et valider avec bouton ENTER
- DMX (mode DMX étendu 34 canaux) + possibilité de réglage de l'adresse DMX via les boutons UP / DOWN et valider avec bouton ENTER
- INDR SE (1 – 2 – 3) = 3 modes Auto ou son. Dans ce mode en appuyant sur le bouton ENTER on bascule entre le mode auto et le mode son (SND sur l'écran)

La séquence SE 1 (mode beam/tunnels, vagues) – SE 2 (animation 1) – SE 3 peut être choisie via le sous menu.

Pour accéder au sous menu, il faut appuyer longuement sur le bouton FUNC (3 secondes) le mot SET apparaît alors en bas à droite de l'écran, vous êtes maintenant dans le menu d'ajustement.

On peut alors choisir la séquence en se mettant sur SE et en appuyant sur ENTER. Ensuite choisir la séquence en utilisant UP/DOWN puis réappuyer sur ENTER pour valider

On peut également via ce sous menu (déconseiller à l'utilisateur débutant) :

- Paramétrer les moteurs X et Y via dr – X et dr – Y
- Inverser le sens des moteurs (SWAP XY)
- Régler la taille de projection (X-SIZE avec valeur de 0 à 100 et Y-SIZE avec valeur de 0 à 100)
- Activer / désactiver la télécommande (REMOTE – ON/OFF)

Pour quitter ce sous menu il faut réappuyer longuement sur FUNC.

Mode DMX simplifié à 5 Canaux

Note: Dans ce mode, les scènes intégrées sont utilisées telles quelles sont autre réglage. S

| CANAL | Valeur DMX | DESCRIPTION |
|---------------------------------|------------|---|
| CH 1 On/off power | 0 | OFF |
| | 1-255 | ON |
| CH2 Act auto/sound | 0-127 | AUTO |
| | 128-255 | SOUND CONTROLLED |
| CH3 Gallery Menu (scenes) | 0-15 | 1 gallery (0) |
| | 16-31 | 2 gallery (16) |
| | 32-239 | 3 gallery (32) |
| | 240-255 | 40 gallery (240) |
| CH4 Scenes | 0-255 | Each value corresponds to a pattern, the value exceeds the number of patterns, the system with the largest number instead |
| CH5 colors | 0-31 | RGB |
| | 32-63 | red |
| | 64-95 | yellow |
| | 96-127 | green |
| | 128-159 | blueviolet |
| | 160-191 | blue |
| | 191-223 | purple |
| | 224-255 | white |

Mode professionnel à 34 Canaux RESERVE AUX PROFESSIONNELS AVERTIS

Order 1: Professional DMX mode is available to the experienced lighting engineers, who are professional in DMX

Table 1 (PATTERN A):

Note: Table 1: CH1-Ch17, pattern A's channel function, except for special instructions, only control the pattern A, pattern B is not controlled by this 17 channels:

| CHANNEL | DMX value | DESCRIPTION |
|---------------------------------------|-----------|--|
| CH 1 On/off power | 0 | OFF |
| | 1-99 | ON |
| | 100-199 | AUTO |
| | 200-254 | retain |
| | 255 | Pattern A closed light, pattern B output light |
| CH2 Out of bounds and pattern size | 0-49 | Out of bounds |
| | 50-99 | Reentry |
| | 100-149 | blanking |
| | 150-199 | Blanking+ pattern enlarge |
| | 200-255 | retain |
| CH3 Gallery Menu (sences) | 0-15 | 1 gallery (0) |
| | 16-31 | 2 gallery (16) |
| | 32-239 | 3 gallery (32) |
| | 240-255 | 40 gallery (240) |
| CH4 Gallery choose | 0-255 | Each value corresponds to a pattern, when the value exceeds the number of patterns, the system uses the largest number |

| | | |
|-------------------------------------|---------|------------------------------------|
| CH5 Patterns zooming | 0 | No zooming |
| | 1-31 | Zooming 1 |
| | 32-63 | Zooming 2 |
| | 64-95 | Zooming3 |
| | 96-127 | Zooming4 |
| | 128-159 | Zooming 5 |
| | 160-191 | Zooming 6 |
| | 192-223 | Zooming 7 |
| | 224-255 | Zooming8 |
| CH6 Patterns rotating | 0-63 | Manual rotating |
| | 64-95 | Rotating 1 |
| | 96-127 | Rotating 2 |
| | 128-159 | Rotating 3 |
| | 160-191 | Rotating 4 |
| | 192-223 | Rotating 5 |
| | 224-255 | Rotating 6 |
| CH7 Horizontal moving | 0-63 | Manual moving |
| | 64-95 | Horizontal 1 |
| | 96-127 | Horizontal 2 |
| | 128-159 | Horizontal 3 |
| | 160-191 | Horizontal 4 |
| | 192-223 | Horizontal 5 |
| | 224-255 | Horizontal 6 |
| CH8 Vertical moving | 0-63 | Manual moving |
| | 64-95 | vertical 1 |
| | 96-127 | vertical 2 |
| | 128-159 | vertical 3 |
| | 160-191 | vertical 4 |
| | 192-223 | vertical 5 |
| | 224-255 | vertical 6 |
| CH9 X axis Horizontal zooming | 0-63 | Manual X zooming |
| | 64-95 | X zooming 1 |
| | 96-127 | X zooming 2 |
| | 128-159 | X zooming 3 |
| | 160-191 | X zooming 4 |
| | 192-223 | X zooming 5 |
| | 224-255 | X zooming 6 |
| CH10 Y axis vertical zooming | 0-63 | Manual Y zooming |
| | 64-95 | Y zooming 1 |
| | 96-127 | Y zooming 2 |
| | 128-159 | Y zooming 3 |
| | 160-191 | Y zooming 4 |
| | 192-223 | Y zooming 5 |
| | 224-255 | Y zooming 6 |
| CH11 Force Segmentation Color | 0 | Patterns original colors |
| | 1-255 | The length of the segmented colors |
| CH12 | 0-7 | original |

| | | |
|---|----------------------|---|
| Patterns discolor | 8-15 | red |
| | 16-23 | yellow |
| | 24-31 | green |
| | 32-39 | blueviolet |
| | 40-47 | blue |
| | 48-55 | purple |
| | 56-63 | white |
| | 64-95 | Red/green/blue discolor |
| | 96-127 | Blueviolet/blue/purple discolor |
| | 128-159 | 7 colors discolor |
| | 160-191 | RGB discolor |
| | 192-223 | Positive walking color |
| | 224-255 | Reverse walking color |
| CH13 Node and blanking control | 0-63 | Normal blanking control |
| | 64-127 | Patterns without blanking, flyback line banking |
| | 128-159 | Patterns and line without blanking |
| | 160-255 | retain |
| CH14 The auxiliary function of the drawing control (used in conjunction with CH15) | 0-63(CH15) | Manual gradually drawing |
| | 64-127/160-191(CH15) | The moving time of the pattern drawing gradually |
| | 192-255 | The number of nodes that are drawn |
| CH15 Progressive control [CH15 must be used in conjunction with CH14] | 0-31 | Forward hand-drawn gradually |
| | 32-63 | Reverse manual drawing |
| | 64-95 | Extended drawing |
| | 96-127 | Contraction drawing |
| | 128-159 | Both ends are zoomed at the same time |
| | 160-191 | Head and tail were zooming |
| | 192-223 | Walking drawing |
| | 224-255 | Turn over drawing |
| CH16 Auxiliary control of twist deformation effect channel | 0-255 | 0-255, the greater the value, the smaller the distortion. [Note: CH16 can control the degree of twist of the twist effect when zooming, rotating, moving, and twisting effects] |
| CH17 Grating selection and projection amplitude control | 0-255 | [0-19,grating 1] [20-39,grating 2].....[220-239,grating 12] [240-255,grating 13] Note: In each paragraph, the larger the value, the smaller the projection range |

Table 2 (PATTERN B):

Note: Table 2: CH18-CH34, pattern B's channel function, except for special instructions, only control the pattern B, pattern A is not controlled by these 17 channels.

In order to simplify the operation, the functions correspond to pattern A, only special green parts are different.

| CHANNEL | DMX value | DESCRIPTION |
|-----------------------|-----------|-------------|
| CH 18 On/off power | 0 | off working |
| | 1-99 | Act auto |
| | 100-199 | Act sound |
| | 200-254 | retain |

| | | |
|--|---------|--|
| | 255 | Pattern A closed light, pattern B output light |
| CH19 Out of bounds and pattern size | 0-49 | Out of bounds |
| | 50-99 | Reentry |
| | 100-149 | blanking |
| | 150-255 | retain |
| CH20 The distribution angle of each unit of the array | 0-99 | the smaller the value of the segment, the larger the angular distribution of each unit, the gap is a positive gap |
| | 100-199 | the smaller the value of the segment, the larger the angle distribution of each unit, the gap is the negative gap |
| | 200-255 | retain |
| CH21 Gallery choose | 0-255 | Each value corresponds to a pattern, when the value exceeds the number of patterns, the system uses the largest number |
| CH22 Patterns zooming | 0 | No zooming |
| | 1-31 | Zooming 1 |
| | 32-63 | Zooming 2 |
| | 64-95 | Zooming3 |
| | 96-127 | Zooming4 |
| | 128-159 | Zooming 5 |
| | 160-191 | Zooming 6 |
| | 192-223 | Zooming 7 |
| CH23 Patterns rotating | 224-255 | Zooming8 |
| | 0-63 | Manual rotating |
| | 64-95 | Rotating 1 |
| | 96-127 | Rotating 2 |
| | 128-159 | Rotating 3 |
| | 160-191 | Rotating 4 |
| | 192-223 | Rotating 5 |
| CH24 Horizontal moving | 224-255 | Rotating 6 |
| | 0-63 | Manual moving |
| | 64-95 | Horizontal 1 |
| | 96-127 | Horizontal 2 |
| | 128-159 | Horizontal 3 |
| | 160-191 | Horizontal 4 |
| CH25 Vertical moving | 192-223 | Horizontal 5 |
| | 224-255 | Horizontal 6 |
| | 0-63 | Manual moving |
| | 64-95 | vertical 1 |
| | 96-127 | vertical 2 |
| | 128-159 | vertical 3 |
| CH26 X axis | 160-191 | vertical 4 |
| | 192-223 | vertical 5 |
| CH26 X axis | 224-255 | vertical 6 |
| | 0-63 | Manual X zooming |
| | 64-95 | X zooming 1 |

| | | |
|--|-----------------------|--|
| Horizontal zooming | 96-127 | X zooming 2 |
| | 128-159 | X zooming 3 |
| | 160-191 | X zooming 4 |
| | 192-223 | X zooming 5 |
| | 224-255 | X zooming 6 |
| CH27 Y axis vertical zooming | 0-63 | Manual Y zooming |
| | 64-95 | Y zooming 1 |
| | 96-127 | Y zooming 2 |
| | 128-159 | Y zooming 3 |
| | 160-191 | Y zooming 4 |
| | 192-223 | Y zooming 5 |
| | 224-255 | Y zooming 6 |
| CH28 Force Segmentation Color | 0 | Patterns original colors |
| | 1-255 | The length of the segmented colors |
| CH29 Patterns discolor | 0-7 | original |
| | 8-15 | red |
| | 16-23 | yellow |
| | 24-31 | green |
| | 32-39 | blueviolut |
| | 40-47 | blue |
| | 48-55 | purple |
| | 56-63 | white |
| | 64-95 | Red/green/blue discolor |
| | 96-127 | Blueviolut/blue/purple discolor |
| | 128-159 | 7 colors discolor |
| | 160-191 | RGB discolor |
| | 192-223 | Positive walking color |
| 224-255 | Reverse walking color | |
| CH30 Node and blanking control Array control | 0-63 | Normal blanking control |
| | 64-127 | Patterns without blanking, flyback line banking |
| | 128-159 | Patterns and line without blanking |
| | 160-191 | Pattern A anchored in an array pattern of pattern B, pattern color setting same with A |
| | 192-255 | Pattern A anchored in an array pattern of pattern B, pattern color setting same with B |
| CH31 The auxiliary function of the drawing control (used in conjunction with CH32) | 0-63(CH32) | Manual gradually drawing |
| | 64-127/160-191(CH32) | The moving time of the pattern drawing gradually |
| | 192-255 (CH32) | The number of nodes that are drawn |
| CH32 Progressive control [CH32 must be used in conjunction with CH31] When the pattern A is voice-activated, the CH32 action will also become a voice-activated state | 0-31 | Forward hand-drawn gradually |
| | 32-63 | Reverse manual drawing |
| | 64-95 | Extended drawing |
| | 96-127 | Contraction drawing |
| | 128-159 | Both ends are zoomed at the same time |
| | 160-191 | Head and tail were zooming |
| | 192-223 | Walking drawing |

| | | |
|--|---------|---|
| | 224-255 | Turn over drawing |
| CH33 Auxiliary control of twist deformation effect channel | 0-255 | 0-255, the greater the value, the smaller the distortion. [Note: CH33 can control the degree of twist of the twist effect when zooming, rotating, moving, and twisting effects] |
| CH34 projection amplitude control | 0-255 | (0-19),(20-39).....(220-239) , (240-239),(240-255) Note: In each paragraph, the larger the value, the smaller the projection range |

* Bibliothèque d'effets: Chaque librairie est sauvegardé en tant que sequence sur la carte-mère:

- 1: Séquences géométriques(Gypsophalange filter);
- 2: Thème Mariage
- 3: Thème Noël
- 4: Rayons (sans filter)
- 5: Séquence géométrique (Galaxy Nebula);
- 6: Séquences 3D (3D filter);
- 7: Séquences points- cercles (dot circle filter);
- 8: Longue sequence point virtuel (long virtual point filter);

Télécommande

* [INTR] key: Mode automatique intégré.

* [DMX] key: DMX professionnel.

* [E-DMX] key: DMX simplifié.

*[1-9] key: pave numérique

- En mode INTR, appuyez sur une touche [1-9] pour aller en mode de lecture d'une scène. Le chiffre entré correspond à une scène

- En mode DMX ou E- DMX, appuyez sur les touches pour entrer l'adresse DMX.

-en mode de réglage vous pouvez sélectionner la distance de projection lors du réglage de l'angle de projection.

* [+][-]:

- En mode lecture de scène, appuyez pour ajuster le numéro de scène.

- En mode DMX ou E- DMX appuyez pour ajuster l'adresse DMX.

* [SET]:

- Si l'appareil n'est pas en mode de réglage, appuyez 5 fois pour entrer en mode de réglage

- Lorsque l'appareil est en mode de réglage, appuyez pour quitter le mode de réglage.

* [RGB]:

-Sélection de la couleur

* [SEQ]: En mode automatique, entrer en mode lecture d'une séquence.

* [B-Out]: Eteint le laser

* [Sound]:

- En mode auto, appuyez pour régler ou annuler la sensibilité audio.

- Lors du réglage d'une séquence mixte, vous pouvez sélectionner ou annuler une séquence.

- Vous pouvez sélectionner ou annuler un miroir lorsque vous réglez le miroir graphique X, Y ou XY.

- Vous pouvez activer ou désactiver la télécommande lorsque vous en en mode réglage de la télécommande.

* [ENTER]: Lorsque vous entrez un chiffre et la valeur à entrer est inférieure à 100, appuyez pour accélérer.



 NOTE IMPORTANTE : Les produits électriques ne doivent pas être mis au rebut avec les ordures ménagères. Veuillez les faire recycler là où il existe des centres pour cela. Consultez les autorités locales ou votre revendeur sur la façon de les recycler.