# Pro Stage Laser Show System

# User's Manual

*This manual contains important laser system safety and operation information. Read and understand all instructions prior to powering on laser unit the first time, to avoid laser eye injury and to avoid breaking the law. Keep this manual in a safe place for future reference.*

*V.8.0*

# 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 light 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. Immediately upon receiving a fixture, carefully unpack the box. Check the box contents to ensure that all parts are present and that they are in good condition. If any part appears damaged from shipping, or if the box shows signs of mishandling, notify the shipper immediately. In addition, retain the box and all the packing material for inspection. In any event, save the carton and all packing material because, in case that you have to return the fixture to the factory, you will have to do so in its original box, with its original packing.

What is included: 1* Light, 1*Power Cable, 1*User Guide, 1*TF card

Safety Notice: Please read the following notes carefully because they include important safety information about the installation, usage and maintenance of this product. It is important to read all these notes before starting to work with this product.

### Laser Expected Lifespan

Laser gradually decline in brightness over time. HEAT is the dominant factor that leads to the acceleration of this decline. Packaged in clusters, Laser exhibit higher operating temperatures than in ideal or singular optimum conditions. For this reason when all color Laser are used at their fullest intensity, life of the Laser is significantly reduced. It is estimated that a viable lifespan of 5,000 to 10,000 hours will be achieved under normal operational conditions. If improving on this lifespan expectancy is of a higher priority, place care in providing for lower operational temperatures. This may include climatic-environmental and the reduction of overall projection intensity.

Lasers can be hazardous and have unique safety considerations. Permanent eye injury and blindness is possible if lasers are used incorrectly. Pay close attention to each safety REMARK and WARNING statement in the user manual. Read all instructions careful.

## Laser Safety Warnings

Potential laser injury hazard exists with this product! Read these Instructions carefully, which include important information about installation, safe use and service!
Caution:
*Avoid direct eye contact with laser light. Never intentionally expose your eyes or others to direct laser radiation.
*This laser product can potentially cause instant eye injury or blindness if laser light directly strikes the eyes.
*It is illegal and dangerous to shine this laser into audience areas, where the audience or other personnel could get direct laser beams or bright reflections into their eyes.
*It is a US Federal offense to shine any laser at aircraft.

## NON-INTERLOCKED HOUSING WARNING

*This unit contains high power laser devices internally. Do not open the laser housing, due to potential exposure to unsafe levels of laser radiation. The laser power levels accessible if the unit is opened can cause instant blindness, skin burns and fires.

# Installation
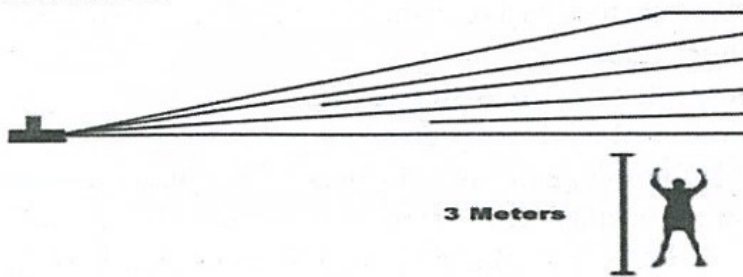


**3 Meters**

**AVOID EYE DIRECT CONTACT!**

*Laser effects projected 3 meters (9.8 ft) above the audience are eye safe. A survey should be taken to assess the likelihood of any reflective surfaces (such as high windows, chrome bars etc) bouncing stray beams back down into the audience.

*Using a fastening clamps on the light and tight to the ceiling in a strong hook..

*Make sure its correct power output and plug the power cable to the wall socket.

* Power must be in earth! Power on the light.

* Do not shoot the beams to the audience!

*Do not look direct into the laser aperture once the laser light is ON. Please pay attention to the Laser Danger Warning Label!

## Caution

After setting up, and before public use, test laser to ensure proper function. Do not use if any defect is detected. Do not use if laser emits only one or two laser beams rather than dozens/ hundreds, as this could indicate damage to the diffraction grating optic, and could allow emission of higher laser levels above Class 3B.

**Do not** point lasers at people or animals. Never look into the laser aperture or laser beams.

**Do not** point lasers in areas in which people can potentially get exposed, such as uncontrolled balconies, etc.

**Do not** point lasers at highly reflective surfaces, such as windows, mirrors and shiny metal. Even laser reflections can be hazardous.

**Never** point a laser at aircraft, this is a federal offense.

**Never** point non-terminated laser beams into the sky.

**Do not** expose the output optic (aperture) to cleaning chemicals.

**Do not** use laser if the laser appears to be emitting only one or two beams.

**Do not** use the laser if the housing is damaged, the housing is open, or if the optics appear damaged in any way.

**Never** open the laser housing. The high laser power levels inside of the protective housing can start fires, burn skin and will cause instant eye injury.

**Never** leave this device running unattended.

*During Assembly, operation, maintenance, please pay special attention to avoid possible exposure to laser and collateral radiation in excess of the accessible emission limits.*

*Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.*

*Protective eye wear is typically required where direct viewing of a Class 3B laser beam may occur.*

**0.5m**

The projector must be installed in a location with adequate distance.

## Cleaning

Fixture Cleaning: Due to fog residue, smoke, and dust cleaning the internal and external lenses should be carried out periodically to optimize light output.

1.Use normal glass cleaner and a soft cloth to wipe down the out- side casing.

2.Clean the external optics with glass cleaner and a soft cloth every 20 days.

3.Always be sure to dry all parts completely before plugging the unit back in. Cleaning frequency depends on the environment in which the fixture operates (I.e. smoke, fog residue, dust, dew). In heavy use we recommend cleaning on a monthly basis. Periodic cleaning will ensure longevity, and crisp beam output.

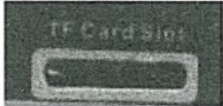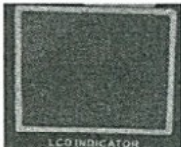## Technical Specification

Features:
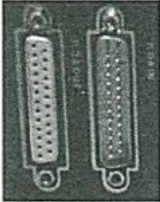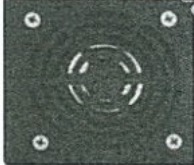
◆ Feature: Animation laser with high-speed optical scanner to create animated graphics, 256 beam show and graphics show patterns, and with the function of unique blanking, frequently flashing, rotating, movement, billowing, zoom (+/-), drawing and speed etc. SD/TF Card supports " .ild " format picture which shows customize animations. All functions are shown through LCD indicator. X and Y patterns can be adjusted separately. The scanning speed of the animations from SD/TF card can be set manually. Animations in SD/TF card can be selected and displayed permanently or replayed times.

◆Scanner: High-speed optical scanner, big angle scanning (0 to 30°)

◆Play Mode (1) Laser: Sound Active, AUTO-Beam, AUTO-Animation, DMX512 (CH6CH19/CH32), Master/ Slave (2) SD card

◆Power Supply: Bi-Voltage 110V to 220V-250V, 50/60HZ, 50W

## Fixture Appearance

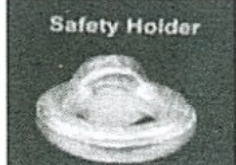| Sound Active Microphone | TF card slot | LCD Indicator for functions | Menue and Enter |
|---|---|---|---|
|  |  |  |  |
| Red, green and blue laser brightness | DMX or Linking Jack | ILDA Interface | ILDA Ethernet interface |
|  |  |  |  |
| Power Coin 110V-240V AC | Power switch ON/OFF for the whole light | Remote Interlock ON/OFF for the whole light | Key Switch on laser ON/OFF |
|  |  |  |  |
| safety holder | Cooling fans | | |
|  |  | | |

# SD Card Function

1. This program only support SD card with FAT32 format. If you buy new SD card, please reformat to FAT32 first.

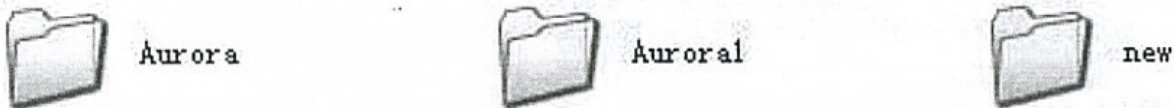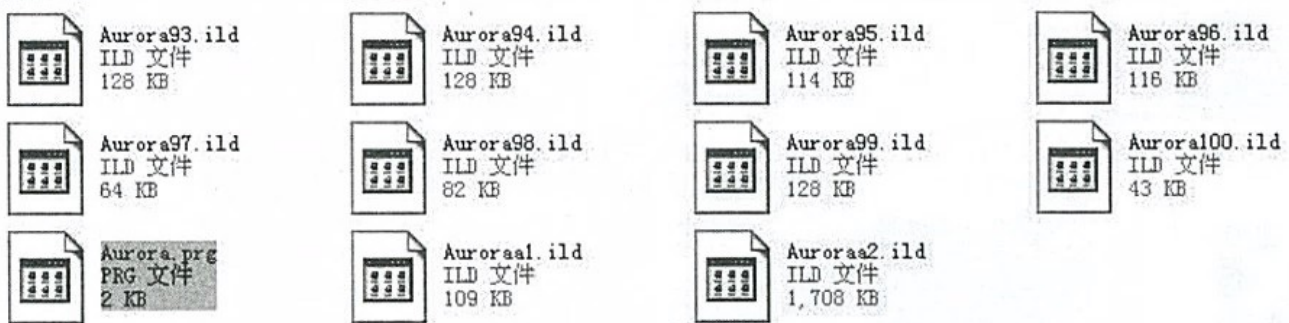    How to format the new SD card:
1. Plug your new SD card onto your computer
2. Click the SD card file on the right mouse and select "Format'
3. Select "FAT32" and start to format the SD card

2. File name is suggested to have less than 8 letters and 3 letters for the format name.

3. It is suggested to use the SD card only for the laser light. Please do not put other documents

into the SD card. This SD card can be put 100 folders and each folder can be put 256 files.

4. After you get our SD card, please plug it onto your computer. Then you will see 3 folders:

 Aurora      Aurora1      new

Open the first folder, you will see 102 ".ild" files and 1 ".prg" file

Aurora93.ild ILD 文件 128 KB    Aurora94.ild ILD 文件 128 KB    Aurora95.ild ILD 文件 114 KB    Aurora96.ild ILD 文件 116 KB

Aurora97.ild ILD 文件 64 KB    Aurora98.ild ILD 文件 82 KB    Aurora99.ild ILD 文件 128 KB    Aurora100.ild ILD 文件 43 KB

Aurora.prg PRG 文件 2 KB    Auroraa1.ild ILD 文件 109 KB    Auroraa2.ild ILD 文件 1,708 KB

Double click the "Aurora.prg" file and select "Microsoft Office Word" to open this .prg file. You will see all the 102 files' name are listed on this "Aurora.prg" file. Every file is equal to one animation displayed in this laser.

**Aurora97.ild, 10, 3**

**Aurora98.ild, 10, 2**

**Aurora99.ild, 10, 2**

**Auroraa1.ild, 10, 3**

**Auroraa2.ild, 5, 1**

What does it mean on this file name? e.g.

## Aurora3.ild, 18, 1

1. "Aurora3.ild" means the file name of your ilda animation
2. "18" means the displaying scanning speed
3. "1" means the displaying time: 1 time
5. How to make your own folder with your own animations?
(1). Use your own laser software to create ".ild" files. Your laser software must support export ".ild" file.
(2). Use our free laser software to create ".ild" files. Please send email if you need our free laser software.
Steps on how to create your own animations with our free laser software:
A. Install the software onto your computer

B. If you have a picture, such as "Disco" on your computer

# Disco

C. Open the Photoshop on your desk, and open the "Disco.jpeg" picture



D. Save this "Disco.jpeg" picture to "Disco.bmp"



E. Open the "Laser Controller" software on your desk
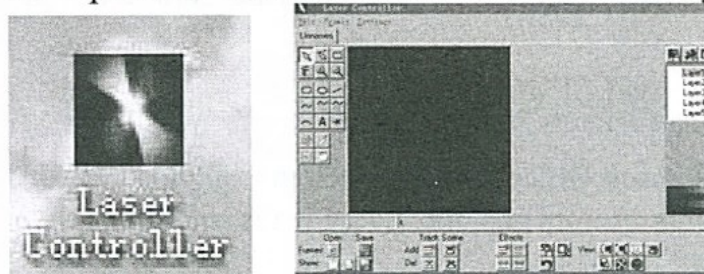


F. Click the "1" to open the "Disco.bmp"
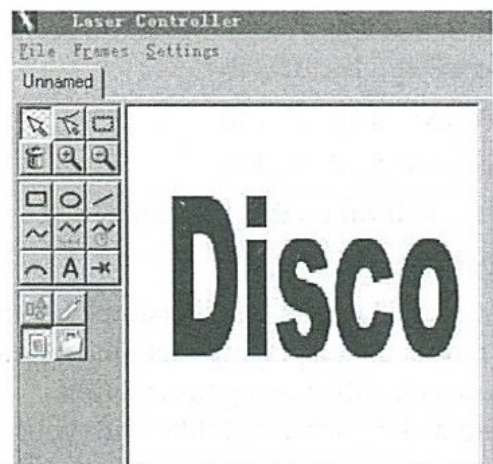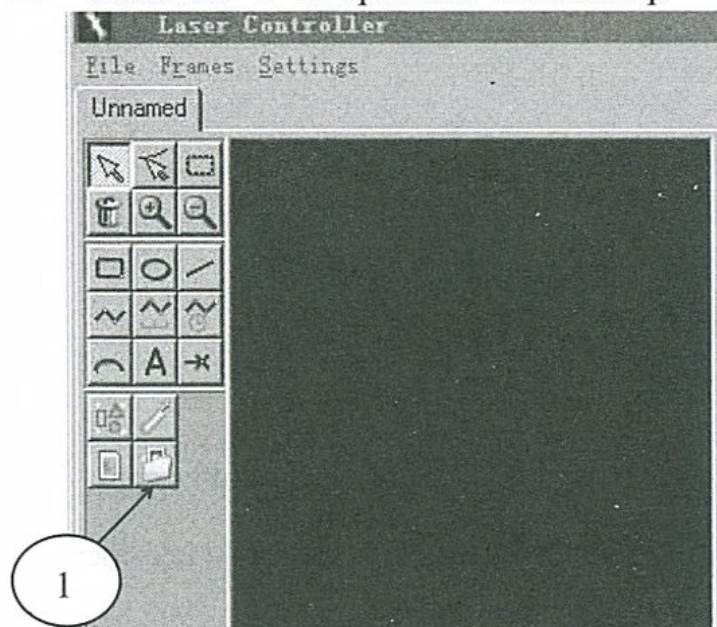
G.  Click the right mouse on the "Disco" and select "Trace Background"
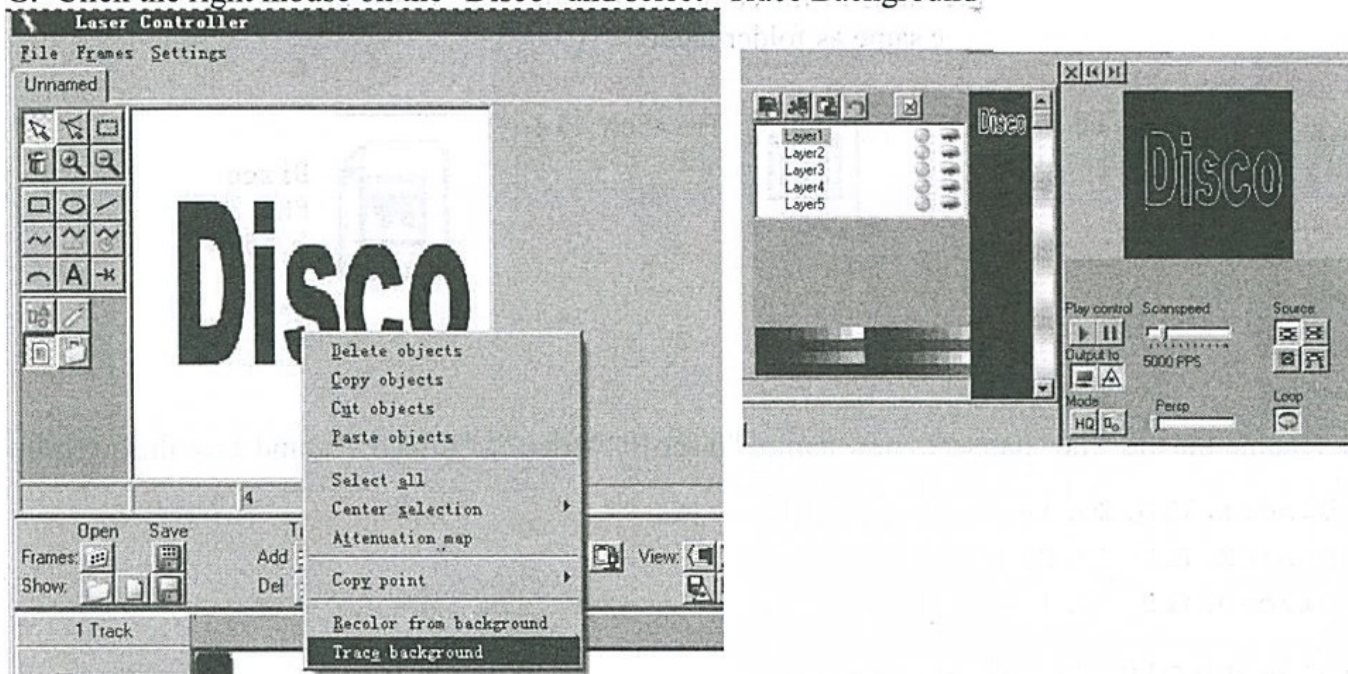


H.  Click "Save" to "disco1.ild". The file type must be "256 colors"!



I. Please make other ".ild" files according to the "A-H" steps, such as "disco2.ild", "disco3.ild", etc.

(4). Copy the folder "New" from SD card onto your desk.Rename this folder to "Disco" . Copy all the ".ild" files onto this folder, such as "disco1.ild", disco2.ild", "disco3.ild", etc.

(5) . Rename the "new.prg" file name to "disco.prg". And open the "Disco.prg" file
Important: Prg name must be the same as folder name!

SPRT2.ild
ILD 文件
102 KB

Telefon.ild
ILD 文件
96 KB

Disco
PRG 文件
1 KB

new
PRG 文件
1 KB

(6). rename the old ".ild" names to new names "disco1", "disco2", "disco3"···, and save this prg file.

Disco1. ILD, 20, 1↵

Disco2. ILD, 20, 30↵

Disco3. ILD, 20, 1↵

↵

(7). Copy this folder "Disco" onto the SD card.

6. How to operate the laser to display animations?
    At the rear panel, you can see:

LCD INDICATOR for functions
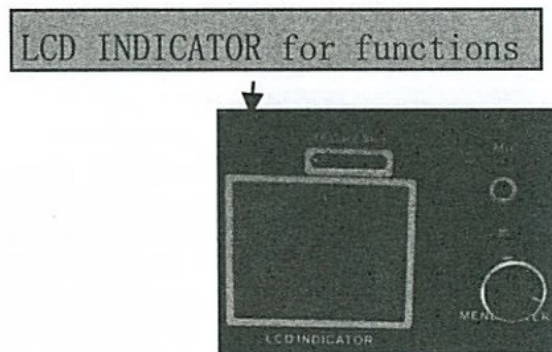
Scroll the MENU knob and select function, then press this knob to ENTER for confirmation.

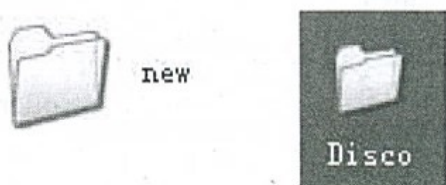| NO. | Menu | Menu description | Settings | Setting description | Notes |
|-----|------|------------------|----------|---------------------|-------|
| 1 | DMX Address | DMX Address | 1-512 | DMX address value | |
| 2 | Show Mode | Play mode | ILD | ILD file one-by-one cyclically display | Automatically running the DMX mode when linking with the DMX512 controller |
| | | | PRG | Display the PRG list in order | |
| | | | Auto | AUTO mode | |
| | | | Sound | Sound mode | |
| 3 | Program | Select the programs in AUTO and Sound mode | progr0 | Program 0 | Programs 1-3 are waiting for the import from preset of DMX512 controller |
| | | | progr1 | Program 1 | |
| | | | progr2 | Program 2 | |
| | | | progr3 | Program 3 | |
| | | | progr4 | Program 4 | |
| 4 | SD FILE | SD card folders | Folder name | Current selected folder name | Only valid when displaying the SD card |

| NO. | Menu | Menu description | Settings | Setting description | Notes |
|-----|------|------------------|----------|---------------------|-------|
| 5 | Size | Graphics/Patterns size | 10-100 | Current pattern size percentage | |
| 6 | Phasic | Built-in patterns direction | X+ Y+ | Phase of the built-in pattern | Only valid for the built-in pattern |
| 7 | Speed | Display speed | 8-40 | Built-in pattern running speed | According to the limited scanner speed setting |
| 8 | DMX State | No DMX signal state | Show | Display on the Show Mode | |
| | | | Black | Black out | |
| 9 | Slave Mode | Master/Slave setting | Slave | Slave | If no M/S linkin, then set into Slave. |
| | | | Master | Mater | |
| 10 | Y Phasic | Y direction | Positive | positive | Only valid for this light and outside ILDA signal |
| | | | Reverse | reverse | |
| 11 | X Phasic | X diction | Positive | positive | |
| | | | Reverse | reverse | |
| 12 | Color Mode | Color mode | RGB | Full colors | |
| | | | White | Single color | |
| 13 | Laser Lock | Laser ON/OFF lock | ON | ON | Laser is OFF when scanning angle is too small nearly single dot |
| | | | OFF | OFF | |
| 14 | Sound sense | Sound sensitivity | 0-100 | Sound sensitivity percentage | |
| 15 | SD Sound | Animations Sound ON/OFF | ON | ON | |
| | | | OFF | OFF | |
| 16 | Highlight | Highlight setting | 0-100 | Highlight percentage | Highlight in the mixed color point |
| 17 | ILDA Lock | ILDA lock | ON | Lock on the ILDA input signal | When using RJ45 Ethernet, select the Lock ILDA input |
| | | | OFF | No lock | |
| 18 | Load Flash | Loading FLASH | ON | Input the ILD program from the SD card | Loading the program from the <LOAD> in the SD card |
| | | | OFF | | |
| 19 | Update Prog | Updating the built-in program/patterns | OFF | No updating | From show1.yuq-show4.yuq input the program/patterns |
| | | | progr1 | Updating program 1 | |
| | | | progr2 | Updating program 2 | |
| | | | progr3 | Updating program 3 | |
| | | | progr4 | Updating program 4 | |
| | | | all | Updating program 1-4 | |

## 7. DMX control:

DMX Control Parameter Chart

| Channel | Function | Value | Description | Notes |
|---------|----------|-------|-------------|-------|
| 1 | Channel mode | 0-49 | Laser OFF | |
| | | 50-99 | CH6 mode | Only for the built-in program |
| | | 100-159 | CH19 mode | Display single animation |
| | | 150-255 | CH32 mode | Display dual animations |
| **CH6 mode** | | | | |
| 2 | Select program list | 0-49 | Program 1 | |
| | | 50-99 | Program 1 | |
| | | 100-159 | Program 1 | |
| | | 150-199 | Program 1 | |
| | | 200-255 | Program 1 | |
| 3 | Select pattern list | 0-255 | Select patterns | |
| 4 | Color change | 0-255 | Color change setting | |
| 5 | Patterns Speed | 0-5 | Original speed | |
| | | 5-255 | Slow to fast | |
| 6 | Sound ON/OFF | 0-127 | Sound OFF | AUTO |
| | | 128-255 | Sound ON | Sound |
| **CH18-32 Mode** | | | | |
| 2 | Select patterns | 0-49 | AUTO | |
| | | 50-99 | Sound | |
| | | 100-149 | PRG | |
| | | 150-199 | ILD | |
| | | 200-255 | Built-in Patterns | |
| 3 | Pattern selection | 0-255 | Each 2 values for one pattern | |
| 4 | Dots display | 0-255 | | |
| 5 | Color | 0-255 | Color list | |
| 6 | Pattern X moving | 0-255 | | |
| 7 | Pattern Y moving | 0-255 | | |
| 8 | Pattern size | 0-255 | | |
| 9 | Pattern X direction rotation | 0-255 | | |
| 10 | Pattern Y direction rotation | 0-255 | | |
| 11 | Pattern Z direction rotation | 0-255 | | |
| 12 | Drawing | 0-255 | | |
| 13 | X waving | 0-255 | | |
| 14 | Y waving | 0-255 | | |
| 15 | flashing | 0-255 | | |
| 16 | Red brightness | 0-255 | | |
| 17 | Green brightnes | 0-255 | | |
| 18 | Blue brightness | 0-255 | | |

| Channel | Function | Value | Description | Notes |
|---------|----------|-------|-------------|-------|
| 19 | Display effects | 0-49 | Rebound | |
| | | 50-99 | Line | |
| | | 100-149 | Blanking | |
| | | 150-255 | To the opposite | |
| **CH32 Mode** | | | | |
| 20 | Pattern selection | 0-255 | Each 2 values for one pattern | |
| 21 | Dots display | 0-255 | | |
| 22 | Color | 0-255 | Color list | |
| 23 | Pattern X moving | 0-255 | | |
| 24 | Pattern Y moving | 0-255 | | |
| 25 | Pattern size | 0-255 | | |
| 26 | Pattern X direction rotation | 0-255 | | |
| 27 | Pattern Y direction rotation | 0-255 | | |
| 28 | Pattern Z direction rotation | 0-255 | | |
| 29 | Drawing | 0-255 | | |
| 30 | X waving | 0-255 | | |
| 31 | Y waving | 0-255 | | |
| 32 | flashing | 0-255 | | |
| | Red brightness | 0-255 | | |
| | Green brightnes | 0-255 | | |
| | Blue brightness | 0-255 | | |
| | Display effects | 0-49 | Rebound | |
| | | 50-99 | Line | |
| | | 100-149 | Blanking | |
| | | 150-255 | To the opposite | |

Warranty Warnings:

1. Damages caused by the disregard of this user manual are not subject to Warranty.
The dealer will not accept liability for any resulting defects or problems.

2. Please consider that unauthorized modifications on the device are forbidden due to safety reasons.
Please note that damages caused by manual modifications on the device or unauthorized operation by unqualified persons are not subject to warranty.

3. If this device will be operated in any way different to the one described in this manual, it may suffer damages and the guarantee becomes void. Furthermore, any other operation may lead to dangers like short-circuit, burns electric shock, etc.

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