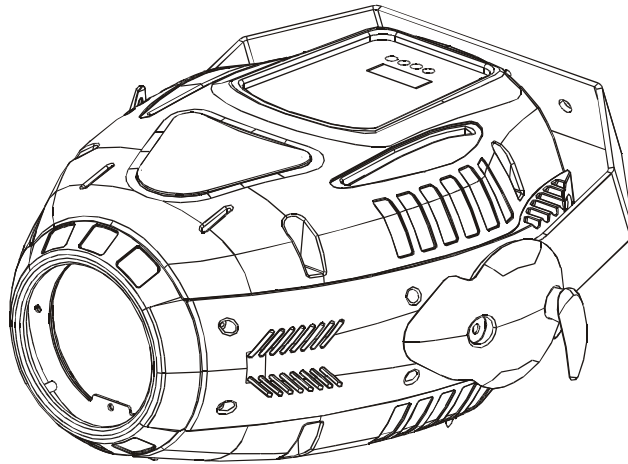# Triton Blue

PROFESSIONAL COLOR CHANGER
USER'S MANUAL

CC 575 CMY

KEEP THIS MANUAL FOR FUTURE NEEDS CE

For your own safety, please read this user manual carefully before installing the device.

	CAUTION! Keep this device away from rain and moisture !
	CAUTION! Unplug mains lead before opening the housing.

Every person involved with the installation, operation and maintenance of this device has to:
-be qualified
-follow carefully the instructions of this manual

INTRODUCTION:

Thank you for having chosen this professional moving head.
You will see you have acquired a powerful and versatile device.

Unpack the device. Inside the box you should find: the fixture device, a power cable, an XLR connection cable, a safety cable and this manual. Please check carefully that there is no damage caused by transportation. Should there be any, consult your dealer and don't install this device.

Features:

· Lamp: Philips MSR 575/2, 7200K, base: GX9.5
· Control signal: Standard DMX-512, 11 channels
· Stand alone operation with master/slave function, can be sound activated
· One color wheel with 7 dichroic filters plus white, with adjustable speed rainbow effect in both directions
· CMY color mixture to get indefinite color effects
· Strobe/shutter: Strobe effect of 1-10 flash per second
· Linear dimmer from 0% ~100%
· Macro function for combinations between CMY color mixture and color-wheel
· Beam shape effect wide and flat beam can steplessly be rotated by 180 °
· Motorized zoom10°~28°
· Display can be flipped 180° to fit for different installation position
· Local and remote lamp on/off
· Preset program: 8 built in programs can be called up via DMX controller
· Editable program: Edit and save the program to inside EEPROM via the control board or external controller, up to 48 scenes can be saved and then can be run in Stand Alone or sound activated.
·Number of scenes in Program Run can be changed individually

Overview
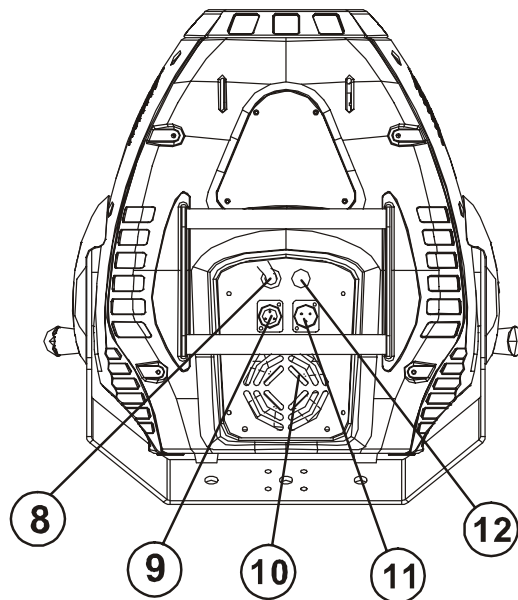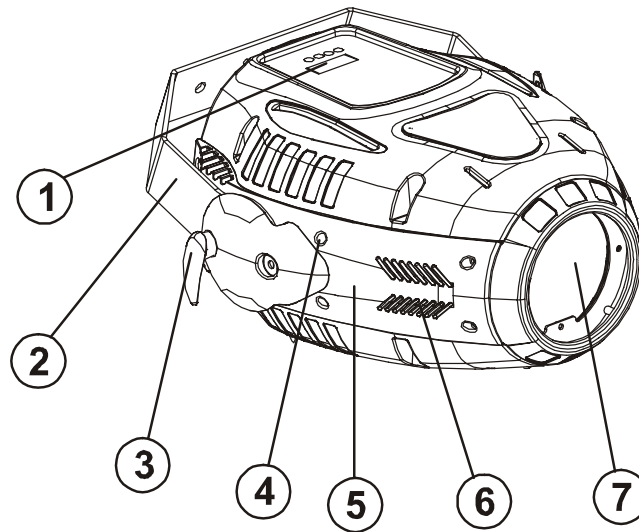
1: Display
2: Mounting bracket
3: Fixation screw
4: Housing screw
5: Housing cover
6: Venting slots

7: Lens
8: Power supply
9: DMX out
10: Fan
11: DMX in
12: Fuse

SAFETY INSTRUCTIONS

CAUTION!
Be careful with your operations.With a dangerous voltage you can
Suffer a dangerous electric shock when touching wires!

This device has left the factory in perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this user manual.

Important:
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.

If the device has been exposed to temperature changes due to environmental changes, do not switch it on immediately. The arising condensation could damage the device. Leave the device switched off until it has reached room temperature.

This device falls under protection-class I. Therefore it is essential that the device be earthed.
The electric connection must carry out by qualified person.
Make sure that the available voltage is not higher than stated at the end of this manual.
Make sure the power cord is never crimped or damaged by sharp edges. If this would be the case, replacement of the cable must be done by an authorized dealer.

Always disconnect from the mains, when the device is not in use or before cleaning it. Only handle the power cord by the plug. Never pull out the plug by tugging the power cord.
During initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective, it should decrease gradually.

CAUTION!
Never touch the device during operation!
The housing may heat up

CAUTION!
Never look directly into the light source,
as sensitive persons may suffer an epileptic shock.

Please be aware that damages caused by manual modifications to the device are not subject to warranty. Keep away from children and non-professionals.

GENERAL GUIDELINES

This device is a lighting effect for professional use on stages, in discotheques, theatres, etc. This fixture is only allowed to be operated with the max alternating current which stated in the technical specifications in the last page of this manual, the device was designed for indoor use only.
Lighting effects are not designed for permanent operation. Consistent operation breaks may ensure that the device will serve you for a long time without defects. Do not shake the device.

Avoid brute force when installing or operating the device.

While choosing the installation-spot, please make sure that the device is not exposed to extreme heat, moisture or dust. The minimum distance between light-output from the projector and the illuminated surface must be more than 0,5 meter.

Always fix the fixture with an appropriate safety cable if you use the clamp to hang up the fixture. When fixing the device on a raised-from-the- ground support, be sure to use no less than screws and nuts of M10 x 25 mm and insert them in the pre-arranged screw holes in the base of the fixture.
If you use the quick lock cam in hanging up the fixture, please make sure the 4 quick lock fasteners turned in the quick lock holes correctly.

Operate the device only after having familiarized with its functions. Do not permit operation by persons not qualified for operating the device. Most damages are the result of unprofessional operation.

Please use the original packaging if the device is to be transported.
For safety reasons, please be aware that all modifications on the device are forbidden.

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

INSTALLATION INSTRUCTIONS
a) Installing or replacing the lamp

⚡	CAUTION! Only install the lamp with the device unplugged from the mains.
⚠	CAUTION! The lamp has to be replaced when it is damaged or deformed.

Before replacing the lamp let the lamp cool down, because during operation, the lamp can reach very high temperature.

During the installation of halogen lamps do not touch the glass bulbs bare handed. Always use a cloth to handle the lamps during insertion and removal.

Do not install lamps with a higher wattage. They generate higher temperatures than which the device was designed for.


For the installation, you need one MSR 575/2

Procedure:
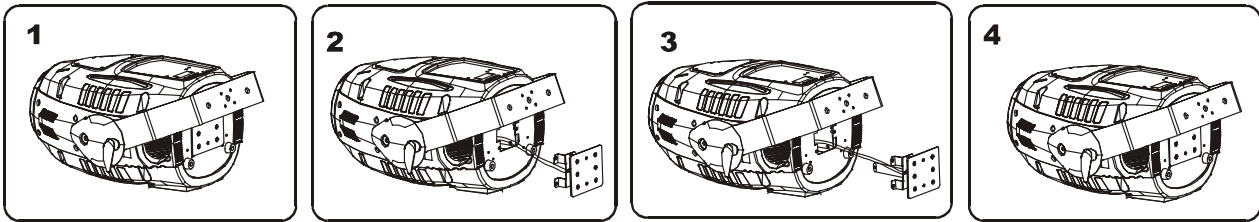
Lamp adjustment:

1) Unscrew the 2 screws A, B on the bottom of the housing, holding the plate where the lamp is underneath.

2) Gently pull the socket holder using the knob in the middle.

3) Carefully insert the lamp into the socket. Please remember there is only one way to insert the lamp. Gently slide the lamp and its lamp holder back into place and fasten the 2 screws.

4) On the access plate there are 3 small screws marked 1, 2 and 3.which are used to adjust the lamp holder in the lamp housing. You can adjust the 3 screws to fine-turn the position of the lamp to get the maximum light output as shown below.
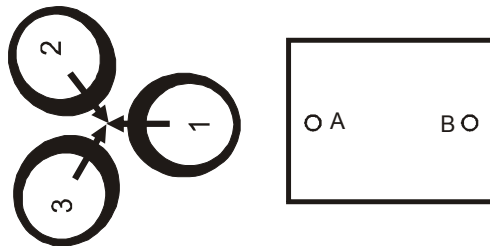
Please remember the lamp is not a hot-restrike type, you must wait for approximately 10 minutes after having turned off the lamp before you can turn it back on again.

⚡ **CAUTION!**
Do not operate this device with open cover

---

b) Mounting the device

⚠ **CAUTION!**
Please consider the EN 60598-2-17 and the other respective national norms during the installation. The installation must only be carried out by a qualified person.

The installation of the effect has to be built and constructed in a way that it can hold 10 times the weight for 1 hour without any harming deformation.

The installation must always be secured with a secondary safety attachment, e.g. an

appropriate safety cable.
Never stand directly below the device when mounting, removing or servicing the fixture.

The operator has to make sure the safety relating and machine technical installations are approved by an expert before taking the device into operation for the first time.
These installations have to be approved by a skilled person once a year.

	CAUTION! Before taking into operation for the first time, the installation has to be approved by an expert.

Cautions:
The effect should be installed outside areas where persons may reach it, walk by or be seated.

	CAUTION! When installing the device, make sure there is no highly inflammable material within a distance of min. 0,5m

Overhead mounting requires extensive experience, including amongst others calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the device. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.
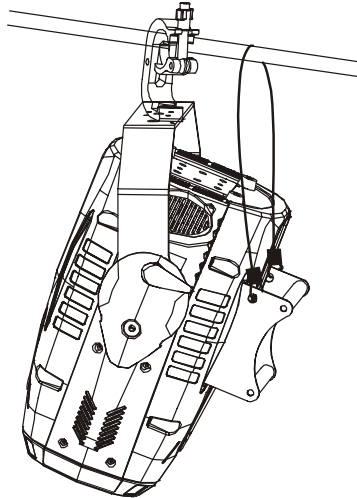
	CAUTION! The electric connection must only be carried out by a qualified electrician.

Before mounting make sure that the installation area can hold a minimum point load of 10 times the device's weight.
Connect the fixture to the mains with the power plug.
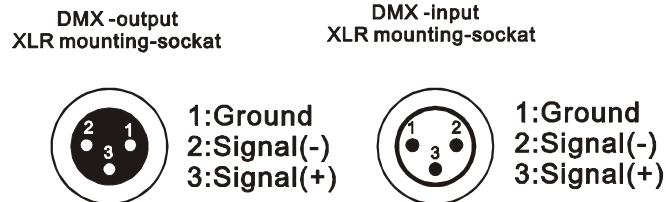
Installation method via clamp
Please refer to the picture below:

Screw one clamp each via a M10 screw and nut directly into the bracket of the scanner. Pull the safety-chain through the bracket of the base and over the trussing system or a safe fixation spot.

DMX-512 control connection
Connect the provided XLR cable to the female 3-pin XLR output of your controller and the other side to the male 3-pin XLR input of the moving head. You can chain multiple Moving head together through serial linking. The cable needed should be two core, screened cable with XLR input and output connectors. Please refer to the diagram below.

DMX -output
XLR mounting-sockat

DMX -input
XLR mounting-sockat

1:Ground
2:Signal(-)
3:Signal(+)

1:Ground
2:Signal(-)
3:Signal(+)

DMX-512 connection with DMX terminator
For installations where the DMX cable has to run a long distance or is in an electrically noisy environment, such as in a discotheque, it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control signal by electrical noise. The DMX terminator is simply an XLR plug with a 120 Ω resistor connected between pins 2 and 3,which is then plugged into the output XLR socket of the last fixture in the chain. Please see illustrations below.

120 Ω

2
3
1

PIN 3
PIN 2

Controller   Starting address 1   Starting address 12   Starting address 23
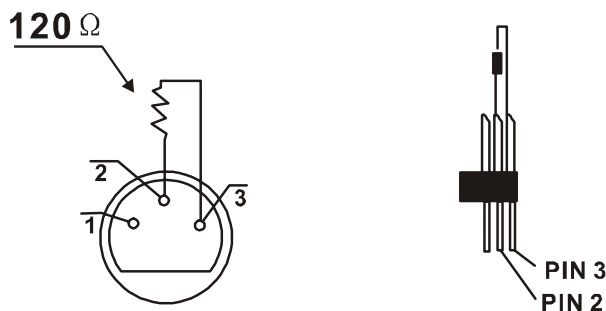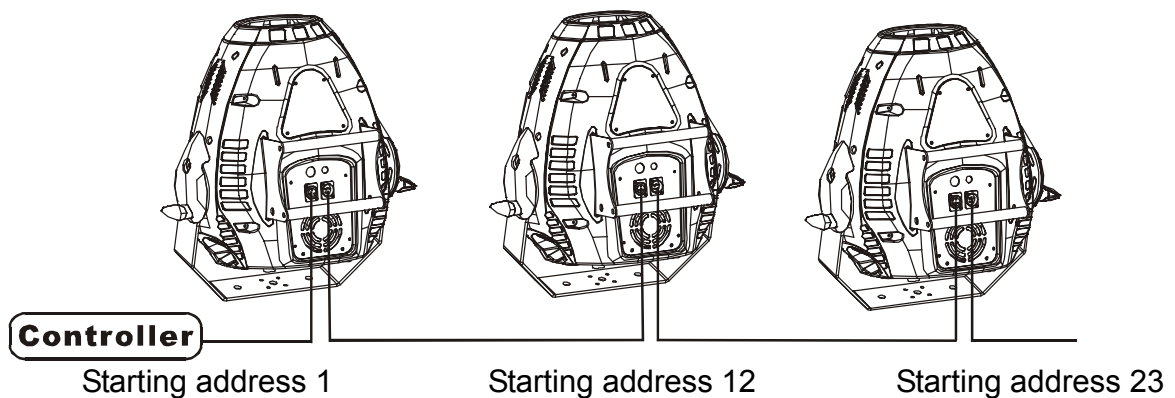
Projector DMX starting address selection

All fixtures should be given a DMX starting address when using a DMX signal, so that the correct fixture responds to the correct control signals. This digital starting address is the channel number from which the fixture starts to "listen" to the digital control information sent out from the DMX controller. The allocation of this starting address is achieved by setting the correct number on the display located on the base of the device.

You can set the same starting address for all fixtures or a group of fixtures, or make different address for each fixture individually.

If you set the same address, all the units will start to "listen" to the same control signal from the same channel number. In other words, changing the settings of one channel will affect all the fixtures simultaneously.

If you set a different address, each unit will start to "listen" to the channel number you have set, based on the quantity of control channels of the unit. That means changing the settings of one channel will affect only the selected fixture.

In the case of the lighting, which is 11 channel fixture, you should set the starting address of the first unit to 1, the second unit to 12 (11 + 1), the third to 23 (12 + 11), and so on.

Note:

The modes of DMX 512 data and lamp are shown via the display:

DMX OK   NO DMX   NO DMX   DMX OK
   Lamp on   Lamp on   Lamp off   Lamp off
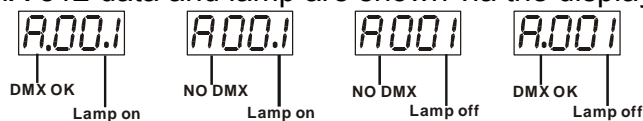
1. After switching on, the device will automatically detect whether DMX 512 data is received or not. If the data is received, the display will show **"A.001"** with the actually set address. If there is no data received at the DMX-input, the display will flash **"A001"** with the actually set address.

This situation can occur if:

- the 3 PIN XLR plug (cable with DMX signal from controller) is not connected with the input of the device.
- the controller is switched off or defective, if the cable or connector is defective or the signal wires are swap in the input connector.

It's necessary to insert the XLR termination plug (with 120 Ohm) in the last lighting in the link in order to ensure proper transmission on the DMX data link.

2. If the lamp is on, the display will show "A00.1" with the actually set address. If the lamp is off, the display will show "A001" with the actually set address.

Control Board

The Control Board offers several features: you can simply set the starting address, switch on and off the lamp, run the pre-programmed program or make a reset.

The main menu is accessed by pressing the **Mode/esc**-button until the display starts flashing. Browse through the menu by pressing the **Up**-button or **Down**-button. Press the **Enter**-button in order to select the desired menu. You can change the selection by pressing the **Up**-button or **Down**-button. Confirm every selection by pressing the Enter-button. You can leave every mode by pressing the **Mode/esc**-button. The functions provided are described in the following sections.

	Main menu	Sub.menu	Extension	Display	function
0	MODE	ADDR	VALU	A001~AXXX	DMX address setting
			SLAV	ON/OFF (SLAV)	Slave setting
			EBOC	ON/OFF	Change DMX address via external controller
		RUN	AUTO	ALON (AU-A)	Automatic Run in Stand Alone
				MAST (AU-M)	Automatic Run as Master
			SOUN	ALON (SO-A)	Sound-controlled Run in Stand Alone
				MAST (SO-M)	Sound-controlled Run as Master
		DISP	VALU	D–XX D-00 (DXXX)	Display the DMX 512 value of each channel
			RDIS	ON/OFF	Reverse display
			CLDI	ON/OFF	Shut off LED display
1	LAMP	OPEN	ON/OFF		Lamp on/off
		LAAU	ON/OFF		Lamp automated on with power
		ONLI	ON/OFF		Lamp on/off via controller
		DELA	D–XX D-05		Delay lamp on
2	SET	MIC	M-XX		Mic sensitivity
		AUTO	Clos/Hold/Auto/Audi		No DMX Status
		FANS	HIGH/AUTO		Fan's mode select
		REST			Reset
		LODA	ON/OFF		Restore factory settings
		VER	V-1.0~V-9.9		Software version
3	ADJU	LADJ	ON/OFF		Lamp adjustment
		TEST	T–01~T–30		Test function of each channel
		WHEL	CODE	CXXX	Fixture code *code is "C050"
			CH01~CH30	XXXX(-128~127)	Motor Calibration
4	TIME	MATI	0000~9999(hours)		Fixture running time
		LATI	0000~9999(hours)		Lamp running time
		CLMT	ON/OFF		Clear fixture time
		CLLT	ON/OFF		Clear lamp time
5	EDIT	STEP	S–01 ~S–48		Steps of Program Run
		REC.	RE.XX		Auto Save Scene
		SC01 ~ SC48	C–01~C–30	0 1 XX(00~FFH) 3 0 XX(00~FFH)	Edit the channels of each scene
			TIME	T XXX(001~999)	Time for each scene
			CNIN	ON/OFF	Edit program via controller

Main functions

$$\boxed{\Pi\Box dE} - \boxed{L\,R\Pi P} - \boxed{SEt} - \boxed{RdJU} - \boxed{t\,I\Pi E} - \boxed{Ed\,It}$$

$\boxed{\Pi\Box dE}$ **- Main menu 0**

1. Press **[MODE/ESC]** to enter the main menu **"MODE"** (display flashing)
2. Press **[ENTER]** and select **"ADDR"**, **"RUN"** or **"DISP"** by pressing **[UP]** or **[DOWN]** button.
3. Press **[ENTER]** for selecting the desired sub menu.

$$\boxed{\Pi\Box dE} - \boxed{Rddr}$$
$$\boxed{r\,U\Pi}$$
$$\boxed{d\,ISP}$$

$\boxed{Rddr}$ **- DMX address setting, Slave setting**

$$\boxed{\Pi\Box dE} - \boxed{Rddr} - \boxed{URLU} - \boxed{R\Box\Box\,I-R\,IIIIII}$$
$$\boxed{SLRU} - \boxed{\Box\Pi/\Box FF}$$
$$\boxed{Eb\Box C} - \boxed{\Box\Pi/\Box FF}$$

$\boxed{URLU}$ **- DMX address setting**
With this function, you can adjust the desired DMX-address via the Control Board.
1. Select **"VALU"** by pressing **[UP]** or **[DOWN]** button.
2. Press **[ENTER]**, the display shows **"AXXX"**, **"XXX"** stands for the DMX address from 001 to 511.
3. Adjust the DMX address by pressing **[UP]** or **[DOWN]** button.
4. Press **[ENTER]** to confirm or pressing **[MODE/ESC]** to return to main menu.

$\boxed{SLRU}$ **- Slave setting**
With this function, you can define the device as slave.
1. Select **"SLAV"** by pressing **[UP]** or **[DOWN]** button.
2. Press **[ENTER]**, the display shows **"ON"** or **"OFF"**.
3. Press **[UP]** to select **"ON"** if you wish to enable this function or press [DOWN] to select **"OFF"** if you don't.
4. Press **[ENTER]** to confirm or press **[MODE/ESC]** to return to main menu.

$\boxed{Eb\Box C}$ **-DMX address setting via controller**
With this function, you can adjust the desired DMX-address via an external controller.
This function can only be activated when the DMX-value of all other channels is set to "0" on the controller.
Select "EBOC" by pressing [UP] or [DOWN].
Press [ENTER], the display shows "ON" or "OFF".
Press [UP] to select "ON" if you wish to enable this function or [DOWN] to select "OFF" if you don't.
Press [MODE/ESC] to confirm.
Press [ENTER] in order to return to the main menu.

On the controller, set the DMX-value of channel 1 to "7".

Set the DMX-value of channel 2 to "7"or "8". When set to "7" you can adjust the starting address between 1 and 255. When set to "8" you can adjust the starting address between 256 and 511.

Set the DMX-value of channel 3 to the desired starting address. If you want to set the starting address to 57, set channel 1 to "7", channel 2 to "7" and channel 3 to "57". If you want to set the starting address to 420, set channel 1 to "7", channel 2 to "8" and channel 3 to "164" (256+164=420).

Wait for approx. 20 seconds and the unit will carry out a reset. After that, the new starting address is set.

� r⌐UN⌐ - Program Run, Master setting

With the function **"RUN"**, you can run the internal program. You can set the number of steps under Step. You can edit the individual scenes under Edit. You can run the individual scenes either automatically (AUTO), i.e. with the adjusted Step-Time or sound-controlled (SOUN). The selection "ALON" means Stand Alone-mode and "MAST" that the device is defined as master.

```
NOdE - rUN - AUtO - ALON
                       MASt
            SOUN  - ALON
                       MASt
```
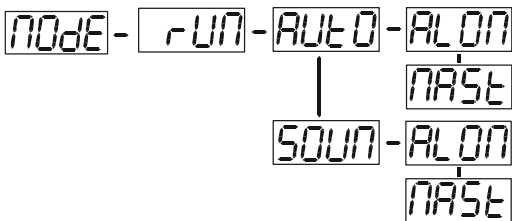
1. Select **"AUTO"** or **"SOUN"** by pressing **[UP]** or **[DOWN]** button.
2. Press **[ENTER]** for selecting the desired extension menu.
4. Select **"ALON"** or **"MAST"** by pressing **[UP]** or **[DOWN]** button.
5. Press **[ENTER]** to confirm or Press **[MODE/ESC]** to return to the main menu.

dISP - Display the DMX-value, Reverse display, Shut off LED display

```
NOdE - dISP - VALU - d-00
              rdIS - ON/OFF
              CLdI - ON/OFF
```
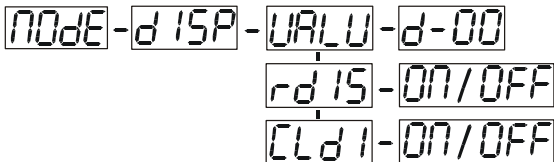
VALU - Display the DMX 512 value of each channel

With this function you can display the DMX 512 value of each channel.
1. Select **"VALU"** by pressing **[UP]** or **[DOWN]** button.
2. Press **[ENTER]** to confirm; the display shows**"D-00"**. In this setting, the DMX-adjustment of every channel will be displayed.
3. The display shows **"D-XX**, "**XX"** stands for the DMX-value of the selected channel, Press **[UP]** or **[DOWN]** button in order to select the desired channel. If you select **"D-14"** the display will only show the DMX-value of the 14th channel.
4. Press **[ENTER]** to confirm or Press **[MODE/ESC]** to return to the main menu.

rdIS - Reverse display

With this function you can rotate the display by 180°.
1. Select **"RDIS"** by pressing **[UP]** or **[DOWN]** button.
2. Press **[ENTER]**, the display shows **"ON"** or **"OFF"**.
3. Press **[UP]** to select **"ON"** if you wish to enable this function or press **[DOWN]** button to **"OFF"** if you don't; the display will rotate by 180°.
4. Press **[ENTER]** to confirm or Press **[MODE/ESC]** to return to the main menu.

`CLdI` **- Shut off LED display**

With this function you can shut off the LED display after 2 minutes.
1. Select **"CLDI"** by pressing **[UP]** or **[DOWN]** button.
2. Press **[ENTER]**, the display shows **"ON"** or **"OFF"**.
3. Press **[UP]** to select **"ON"** if you wish to enable this function or press **[DOWN]** button to **"OFF"** if you don't.
4. Press **[ENTER]** to confirm or Press **[MODE/ESC]** to return to the main menu.

`LAMP` **- Main menu 1**

`LAMP` – `OPEN` – `ON/OFF`
　　　　　`LAAU` – `ON/OFF`
　　　　　`ONLI` – `ON/OFF`
　　　　　`dELA` – `d-00`

1. Press **[MODE/ESC]** to enter the main menu (display flashing).
2. Press **[UP]** or **[DOWN]** button to select **"LAMP"**.

`OPEN` **- Lamp on/off**

With this function you can switch the lamp on or off via the Control Board.
1. Select **"OPEN"** by pressing **[UP]** or **[DOWN]** button.
2. Press **[ENTER]**, the display shows **"ON"** or **"OFF"**.
3. Press **[UP]** to select **"ON"** if you wish to enable this function or press **[DOWN]** button to **"OFF"** if you don't.
4. Press **[ENTER]** to confirm or Press **[MODE/ESC]** to return to the main menu.

`LAAU` **- Lamp automated on with power.**

With this function you can set the lamp be ignited or not when the fixture is power on.
1. Select **"LAAU"** by pressing **[UP]** or **[DOWN]** button.
2. Press **[ENTER]**, the display shows **"ON"** or **"OFF"**.
3. Press **[UP]** to select **"ON"** if you wish to enable this function or press **[DOWN]** button to **"OFF"** if you don't.
4. Press **[ENTER]** to confirm or Press **[MODE/ESC]** to return to the main menu.

`ONLI` **- Lamp on/off via external controller**

With this function you can switch the lamp on or off via an external controller.
1. Select **"ONLI"** by pressing **[UP]** or **[DOWN]** button.
2. Press **[ENTER]**, the display shows **"ON"** or **"OFF"**.
3. Press **[UP]** to select **"ON"** if you wish to enable this function or press **[DOWN]** button to **"OFF"** if you don't.
4. Press **[ENTER]** to confirm or Press **[MODE/ESC]** to return to the main menu.
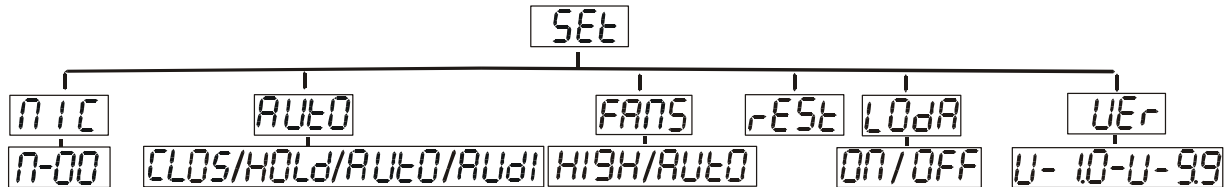

`dELA` **- Delay lamp on**

With this function you delay the lamp ignition.
1. Select **"DELA"** by pressing **[UP]** or **[DOWN]** button.
2. Press **[ENTER]**, the display shows **"D-XX","XX"** stands for the version number, e.g. "D-15" (default

setting is 15 minutes for lamp delay time)
3. Press **[UP]** or **[DOWN]** to set the desired value for lamp delay time.
4. Press **[ENTER]** to confirm or Press **[MODE/ESC]** to return to the main menu.

`SEt`**- Main menu 2**

```
                              SEt
   ┌──────────┬──────────────┬────────┬──────┬─────────┐
  NIC        AUtO          FANS   rESt  LOdA      UEr
  N-00  CLOS/HOLd/AUtO/AUdI  HISH/AUtO      ON/OFF  U-1.0-U-9.9
                                -
```

`NIC`-Mic sensitivity
With this function you can adjust the sensitivity of the microphone.
1. Select **"MIC"** by pressing **[UP]** or **[DOWN]** button.
2. Press **[ENTER]**, the display shows **"M-XX"**, **"XX"** stands for the number from 0 to 99.
3. Press **[ENTER]** to confirm or Press **[MODE/ESC]** to return to the main menu.

`AUtO`-Automatic Run by no DMX
With this function you can automatic run the device by no DMX.
1. Select "AUTO" by pressing **[UP]** or **[DOWN]** button.
2. Press **[ENTER]**, the display shows "**CLOS**", "**HOLD**", "**AUTO**" or "**AUDI**".
3. Press **[UP]** or **[DOWN]** button to select "**CLOS**", "**HOLD**", "**AUTO**" or "**AUDI**", the default is "**HOLD**".
4. Press **[ENTER]** to confirm or Press **[MODE/ESC]** to return to the main menu.

`FANS`**- Fan's mode select**
With this function you can select the Fan's mode.
1. Select **"FANS"** by pressing **[UP]** or **[DOWN]** button.
2. Press **[ENTER]**, the display shows **"HIGH"** or **"AUTO"**.
3. Select **"HIGH"** or **"AUTO"** by pressing **[UP]** or **[DOWN]** button.
4. Press **[ENTER]** to confirm or Press **[MODE/ESC]** to return to the main menu.

`rESt`**- Reset**
With this function you can reset the device via the Control Board.
1. Select **"REST"** by pressing **[UP]** or **[DOWN]** button.
2. Press **[ENTER]** to confirm or Press **[MODE/ESC]** to return to the main menu.

`LOdA`**- Restore factory settings**
With this function you can restore the factory settings of the device. All settings will be set back to the default values (shaded). Any edited scenes will be lost.
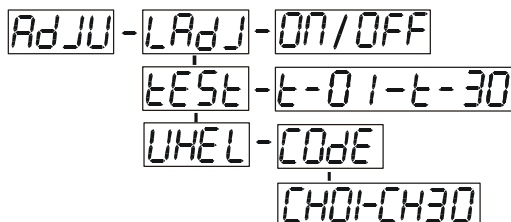1. Select **"LODA"** by pressing **[UP]** or **[DOWN]** button.
2. Press **[ENTER]**, the display shows **"ON"** or **"OFF"**.
3. Press **[UP]** to select **"ON"** if you wish to enable this function or press **[DOWN]** button to **"OFF"** if you don't.
3. Press **[ENTER]** to confirm or Press **[MODE/ESC]** to return to the main menu.

`UEr`**- Software version**
With this function you can display the software version of the device.

1. Select **"VER"** by pressing **[UP]** or **[DOWN]** button.
2. Press **[ENTER]**, the display shows **"V-X.X"**, "X.X" stands for the version number, e.g. "V-1.0", "V-2.6".
3. Press **[MODE/ESC]** to return to the main menu.

⟦AdJU⟧- **Main menu 3**

⟦AdJU⟧ - **⟦LAdJ⟧** - **⟦On/OFF⟧**
　　　　　　⟦tESt⟧ - **⟦t-01-t-30⟧**
　　　　　　⟦UHEL⟧ - **⟦COdE⟧**
　　　　　　　　　　　　⟦CH01-CH30⟧

1. Press **[MODE/ESC]** to enter the main menu (display flashing).
2. Press **[UP]** or **[DOWN]** button to select **"ADJU"**.

⟦LAdJ⟧- **Lamp adjustment**
With this function you can adjust the lamp via the Control Board. The shutter opens and the lamp can be adjusted. In this mode, the device will not react to any control signal.
1. Select **"LADJ"** by pressing **[UP]** or **[DOWN]** button.
2. Press **[ENTER]**, the display shows **"ON"** or **"OFF"**.
3. Press **[UP]** to select **"ON"** if you wish to enable this function or press **[DOWN]** button to **"OFF"** if you don't.
4. Press **[ENTER]** to confirm or Press **[MODE/ESC]** to return to the main menu.

⟦tESt⟧- **Test function of each channel**
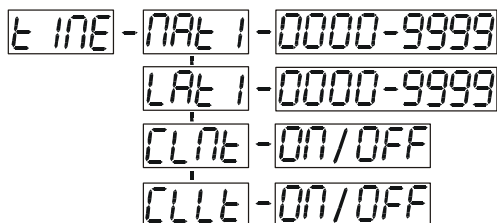With this function you can test each channel on its (correct) function.
1. Select **"TEST"** by pressing **[UP]** button.
2. Press **[ENTER]**, the display shows **"T-XX"**, "X" stands for the channel number.
3. The current channel will be tested.
4. Select the desired channel by pressing **[UP]** or **[DOWN]** button.
5. Press **[ENTER]** to confirm or Press **[MODE/ESC]** to return to the main menu.

⟦UHEL⟧- Motor calibration
With this function you can display the motor calibration.
1. Select **"WHEL"** by pressing **[UP]** or **[DOWN]** button.
2. Press **[ENTER]**, the display shows **"CODE"** or **"CH01-CH30"**.
4. Select **"CODE"** or **"CH01-CH30"** by pressing **[UP]** or **[DOWN]** button.
5. Press **[ENTER]** to confirm or Press **[MODE/ESC]** to return to the main menu.

⟦t InE⟧- **Main menu 4**

⟦t InE⟧ - **⟦nAt I⟧** - **⟦0000-9999⟧**
　　　　　　⟦LAt I⟧ - **⟦0000-9999⟧**
　　　　　　⟦CLnt⟧ - **⟦On/OFF⟧**
　　　　　　⟦CLLt⟧ - **⟦On/OFF⟧**

1. Press **[MODE/ESC]** to enter the main menu (display flashing).
2. Press **[UP]** or **[DOWN]** button to select **"TIME"**.

MAT 1- **Fixture running time**
With this function you can display the running time of the device.
1. Select **"MATI"** by pressing **[UP]** or **[DOWN]** button.
2. Press **[ENTER]**, the display shows **"XXXX"**, "X "stands for the number of hours.
3. Press **[ENTER]** to confirm or Press **[MODE/ESC]** to return to the main menu.

LAT 1- **Lamp running time**
With this function you can display the running time of the lamp.
1. Select **"LATI"** by pressing **[UP]** button.
2. Press **[ENTER]**, the display shows **"XXXX"**, "X "stands for the number of hours.
3. Press **[MODE/ESC]** to return to the main menu.

CLMT- **Clear fixture time**
With this function you can clear the running time of the device.
1. Select **"CLMT"** by pressing **[UP]** or **[DOWN]** button.
2. Press **[ENTER]**, the display shows **"ON"** or **"OFF"**.
3. Press **[UP]** to select **"ON"** if you wish to enable this function or press **[DOWN]** button to **"OFF"** if you don't.
4. Press **[ENTER]** to confirm or Press **[MODE/ESC]** to return to the main menu.

CLLT- **Clear lamp time**
With this function you can clear the running time of the lamp. Please clear the lamp time every time you replace the lamp.
1. Select **"CLLT"** by pressing **[UP]** or **[DOWN]** button.
2. Press **[ENTER]**, the display shows **"ON"** or **"OFF"**.
3. Press **[UP]** to select **"ON"** if you wish to enable this function or press **[DOWN]** button to **"OFF"** if you don't.
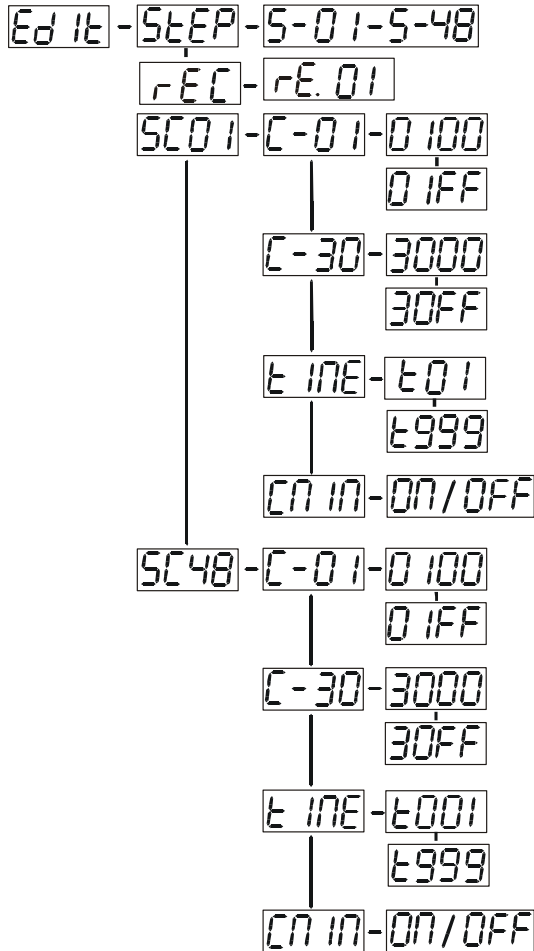4. Press **[ENTER]** to confirm or Press **[MODE/ESC]** to return to the main menu.

Edit - Main menu 5

1. Press **[MODE/ESC]** to enter the main menu (display flashing).
2. Press **[UP]** or **[DOWN]** button to select **"EDIT"**.

```
Edit─STEP─S-01-S-48
     rEC─rE.01
     SC01─C-01─0100
                0 1FF
           C-30─3000
                30FF
           TIME─T01
                T999
           Cn In─On/OFF
     SC48─C-01─0100
                0 1FF
           C-30─3000
                30FF
           TIME─T001
                T999
           Cn In─On/OFF
```

STEP - Define the number of steps in Run
With this function you can define the number of steps in the Program Run.
1. Select **"STEP"** by pressing **[UP]** or **[DOWN]** button.
2. Press **[ENTER]**, the display shows **"S-XX"**, "X" stands for the total amount of steps you want to save, so you can call up to 48 scenes in **"RUN"**. For example if the "XX" is 05, it means that **"RUN"** will run the first 5 scenes you saved in **"EDIT"**.
3. Press **[ENTER]** to confirm or Press **[MODE/ESC]** to return to the main menu.

rEC -Auto Save
With this function you can automatic save the number of steps in the Program Run.
1. Select **"REC"** by pressing **[UP]** or **[DOWN]** button.
2. Press **[ENTER]**, the display shows **"RE.XX"**, **"XX"** stands for the number from 1 to 400.
3. Press **[ENTER]** to confirm or Press **[MODE/ESC]** to return to the main menu.

SC01 - Editing the channels of the individual scenes
With this function you can edit the program to be called up in Run.

a) Editing via the Control Board
1. Select **"SC01"** by pressing **[UP]** or **[DOWN]** button.
2. Press **[ENTER]**, the display shows **"SCXX"**, "X" stands for the scene no. to be edited.
3. Change the scene no. by pressing **[UP]** or **[DOWN]** button.
4. Press **[ENTER]**, the display shows **"C-X"**, "X" stands for the channel no. Such as **"C-01"**, it means you are editing channel 1 of the selected scene.
5. Select the channel no. you would like to edit by pressing **[UP]** or **[DOWN]** button.
6. Press **[ENTER]** to enter editing for the selected channel, the fixture reacts to your settings. The display shows the DMX value of the edited channel. Such as "11XX", it stands for in the channel 11 of the editing scene, the DMX value is XX, XX is a hexadecimal number value "01-FF".
7. Adjust the desired DMX value by pressing **[UP]** or **[DOWN]** button.
8. Press **[ENTER]** in order to edit other channels of this scene.
9. Repeat steps 5-9 until you finish setting all the DMX values for all channels of this scene.
10. Once all the channels completed, the display will flash **"TIME"**
11. Press **[ENTER]** to edit the time needed, the display shows **"TXXX"** , **"XXX"** stands for the time needed to run the current scene, value "001-999". E.g., "002" means you need 0.4ms (002*0.2ms) to run the current scene.
12. Adjust the desired time by pressing **[UP]** or **[DOWN]** button.
13. Press **[ENTER]** to save the settings for the scene you are editing, the display will change to the next scene automatically.

14. Repeat step 3-14 to edit and other scenes, you can edit and save a maximum of 48 scenes.
15. Press **[MODE/ESC]** to exit. The number of steps can be defined under **"STEP"** and the scenes can be called up under **"RUN"**
b) Editing via the external controller
Call up the first scene in your controller now.
1. Select **"SC01"** by pressing **[UP]** or **[DOWN]** button.
2. Press **[ENTER]**, the display shows **"SC01"**.
3. Press **[ENTER]**, the display shows **"C-01"**.
4. Select **"CNIN"** by pressing **[UP]** or **[DOWN]** button.
5. Press **[ENTER]**, the display shows **"OFF"**.
6. Press **[UP]** or **[DOWN]** button .the display shows **"ON"**.
7. Press **[ENTER]**, the display shows **"SC02"**. You successfully downloaded the first scene.
8. Adjust the Step-time as described above under point 12.
9. Call up the second scene in your controller now.
10. Repeat steps 5-11 until all desired scenes are downloaded.
11. Press **[MODE/ESC]** to exit. The number of steps can be defined under **"STEP"** and the scenes can be called up under **"RUN"**

DMX channel´s functions and their values (11 DMX channels):

Channel 1 - Color Wheel 1:

0-15	Open / white
16-31	Color 1
32-47	Color 2
48-63	Color 3
64-79	Color 4
80-95	Color 5
96-111	Color 6
112-127	Color 7
128-189	Forwards rainbow effect from fast to slow
190-191	No rotation
192-255	Backwards rainbow effect from slow to fast

Channel 2 - Cyan Color Wheel :

0-255   Cyan (0-white, 255-100% Cyan)

Channel 3 - Magenta Color Wheel :

0-255   Magenta (0-white, 255-100% magenta)

Channel 4 - Yellow Color Wheel 4:

0-255   Yellow (0-white, 255-100% Yellow)

Channel 5 - Shutter, strobe:

0-31	Shutter closed
32-63	No function (shutter open)
64-95	Strobe effect slow to fast

96-127 No function (shutter open)

128-159 Pulse effect in sequences

160-191 No function (shutter open)

192-223 Random strobe effect slow to fast

224-255 No function (shutter open)

Channel 6 – Dimmer intensity:

0-255 Gradual adjustment of the dimmer intensity from 0-100%

Channel 7 - Effect wheel:

0-70 Full beam

71-230 Beam shaper

231-255 Frost filter

Channel 8 - Zoom:

0-255 Zoom 27 - Zoom 19

Channel 9 - Color macros - CMY and color wheel

0-7	Off	128-135	Macro16
8-15	Macro1	136-143	Macro17
16-23	Macro2	144-151	Macro18
24-31	Macro3	152-159	Macro19
32-39	Macro4	160-167	Macro20
40-47	Macro5	168-175	Macro21
48-55	Macro6	176-183	Macro22
56-63	Macro7	184-191	Macro23
64-71	Macro8	192-199	Macro24
72-79	Macro9	200-207	Macro25
80-87	Macro10	208-215	Macro26
88-95	Macro11	216-223	Macro27
96-103	Macro12	224-231	Macro28
104-111	Macro13	232-239	Macro29
112-119	Macro14	240-247	Macro30
120-127	Macro15	248-255	Random CMY

Channel 10 - Speed Of CMY And Dimmer :

0-225 Speed Max   >Min

226-235 no function

236-245 max speed and black out by while color change

246-255 No function

Channel 11 – Lamp on/off, reset, internal programs

0-19 color change normal

20-39	color change to any position
40-59	Lamp on
60-79	Lamp switch off
80-99	Motor reset
100-119	Internal program 1
120-139	Internal program 2
140-159	Internal program 3
160-179	Internal program 4
180-199	Internal program 5
200-219	Internal program 6
220-239	Internal program 7
240-255	Internal program 8

Error Messages

When you turn on the fixture, it will make a reset first. The display may show "XXer" while there are problems with one or more channels. "XX" stands for the channel equipped with a testing sensor for positioning.

For example, when the display shows "03Er", it means there is some error in channel 3. If there are some errors on channel 1, channel 2, channel 3 at the same time, you may see the error message "01Er", "02Er","03Er" flash repeatly for 5 times, and then the fixture will generate a reset signal, all the stepper motors will reset. If the error messages maintain after performing reset more than 3 times, it will detect whether the fixture has more than 3 errors. If the fixture has more than 3 errors (including 3 errors), all the channels can not work properly; but if the fixture has less than 3 errors, only the channels which have errors can not work properly, others can work as usual.

01Er:
(Color-wheel error) This message will appear after the reset of the fixture if the magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepping-motor is defective (or its drive circuit on the main PCB). The color wheel is not located in the default position after the reset.

07Er:
(Effect-wheel error) This message will appear after the reset of the fixture and if the magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepping-motor is defective (or its driver circuit on the main PCB). The effect-wheel is not located in the default position after the reset.

08Er:
(Zoom-error) This message will appear after the reset of the fixture and if the magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepping-motor is defective (or its driver circuit on the main PCB). The zoom is not located in the default position after the reset.

CLEANING AND MAINTENANCE

The following points have to be considered during the inspection:
1) All screws for installing the devices or parts of the device have to be tightly connected and must not be corroded.
2) There must not be any deformations on the housing, color lenses, fixations and installation spots (ceiling, suspension, trussing).
1) Mechanically moved parts must not show any traces of wearing and must not rotate with

unbalances.
2) The electric power supply cables must not show any damage, material fatigue or sediments.

Further instructions depending on the installation spot and usage have to be adhered by a skilled installer and any safety problems have to be removed.

CAUTION
Disconnect from mains before starting maintenance operation.

We recommend a frequent cleaning of the device. Please use a moist, lint- free cloth. Never use alcohol or solvents.

There are no serviceable parts inside the device except for the lamp. Please refer to the instructions under "Installation instructions".

Should you need any spare parts, please order genuine parts from your local dealer.

TECHNICAL SPECIFICATIONS
Power supply:
  100VAC,50Hz;   120VAC, 50Hz;   208VAC, 50Hz;   220VAC,50Hz;   230VAC,50Hz;   240VAC, 50Hz;
  100VAC,60Hz;   120VAC,60Hz;   208VAC, 60Hz;   220VAC,60Hz;   230VAC,60Hz;   240VAC,60Hz;

Power consumption: 800W
Lamp: MSR 575/2 lamp
Packing dimensions: 56.5x47.5x43cm
Net weight: 27KGS
Gross weight: 29.5KGS

Remark: errors and omissions for every information given in this manual excepted. All information is subject to change without prior notice.