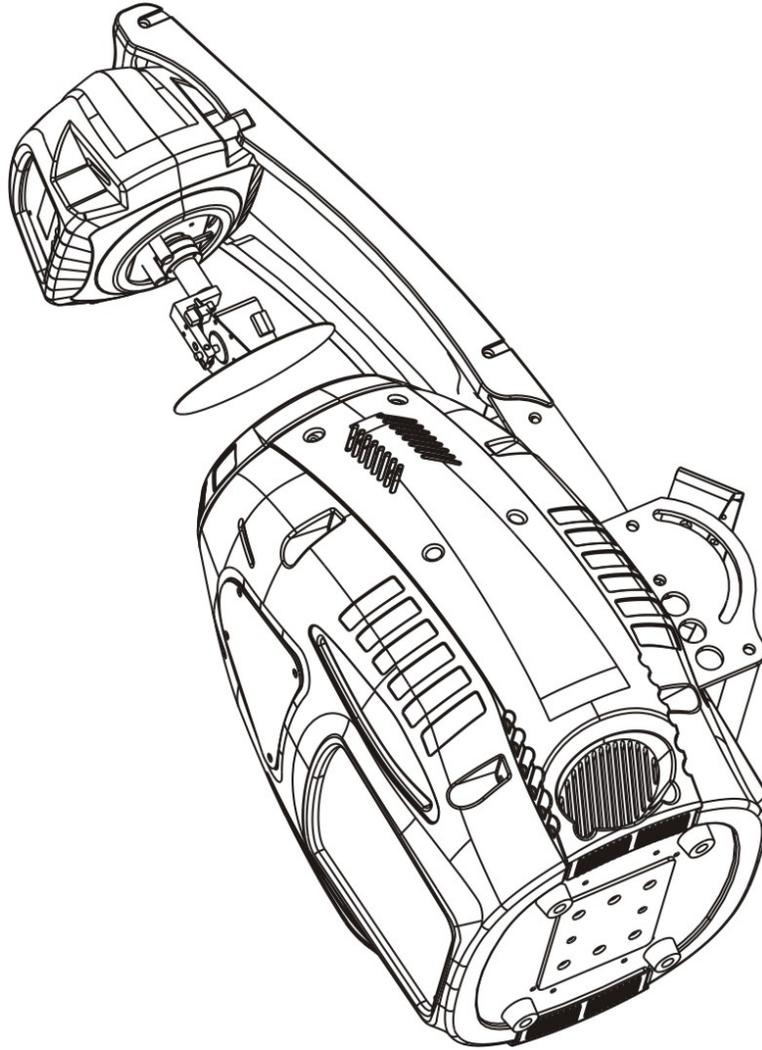


***PROFESSIONAL SCANNER USER'S MANUAL***

**(VER1.0)**



**KEEP THIS MANUAL FOR FUTURE NEEDS**



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:**

- Pan movement: pan 155°
- Tilt movement: tilt 45°
- 3 operation mode: DMX controlled, stand alone or sound activated via built in microphone
- 8 colors plus white, with two direction rainbow effect,
  - Switchable colour change (mode 1: only full colours, mode 2: colour-change at every position)
- rotating gobo wheel has 6 rotating gobos plus open, all gobos can be easily replaceable and gobo indexing
  - static gobo wheel has 7 static gobos plus open with different speed gobo shaking and gobo indexing
- strobe effect : 0~15 flashes per second or random strobe
  - prism and prism rotating , with 16 prism macros
  - step zoom function , 15° , 18° , 21 °lens can be selected
  - dimmer intensity from 0%~100%
  - Iris from 100% to 5%, with pulse iris effect
  - Frost effect
- 8 preset programs selectable
  - Control board with 4-digit display and foil-keyboard for adjusting the DMX-starting address, Pan/tilt-Reverse, Program, Reset, lamp on/off, operating hours and etc
- digital display can be turn 180° reverse to fit for different installation position
- local or remote resetting
- auto test for all functions
- value of each DMX-channel can be displayed
- save program : edit and save the program to the incorporated EEPROM through the front control panel or external controller; can save maximum 48 scenes, and run the saved program by the “run” menu from the front control panel

## 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.

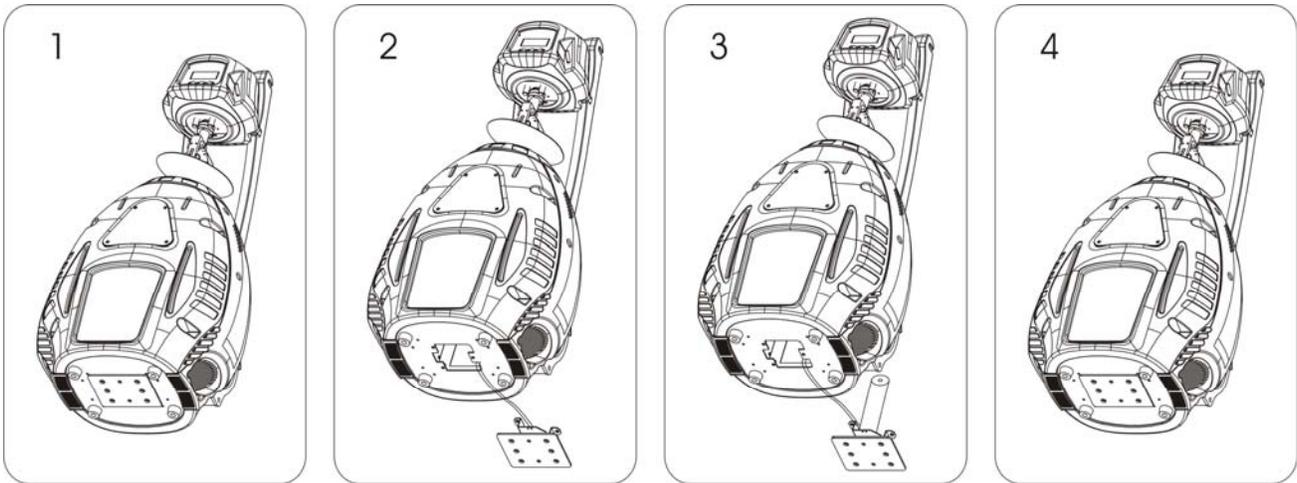
Before replacing the lamp let the lamp cool down, because during operation, the lamp can reach very high temperature.

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.

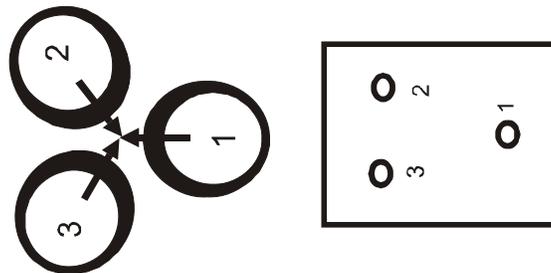
Do not install lamps with a higher wattage. They generate higher temperatures than which the device was designed for.

For the installation, you need one Philips MSR 575/2

#### **Procedure :**



- 1) Unscrew the 3 screws A, B, C 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-tune 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!**

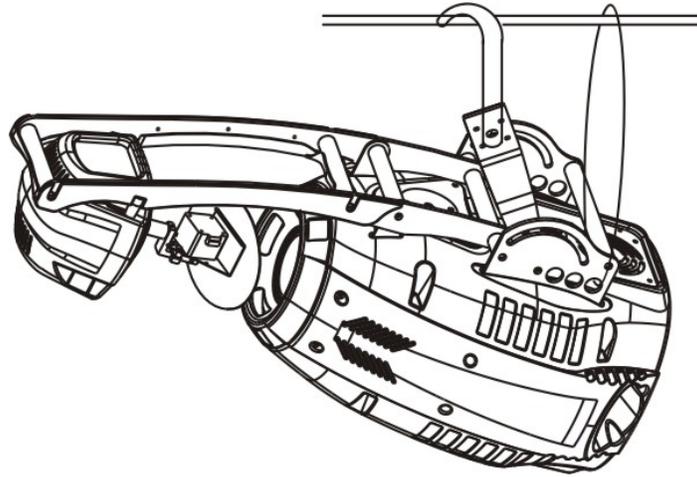
The electric connection must only be carried out by a qualified electrician.

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**

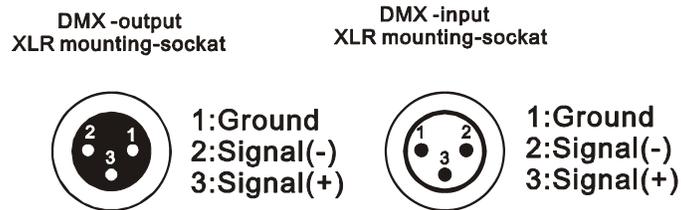
Please refer to the picture below:



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.

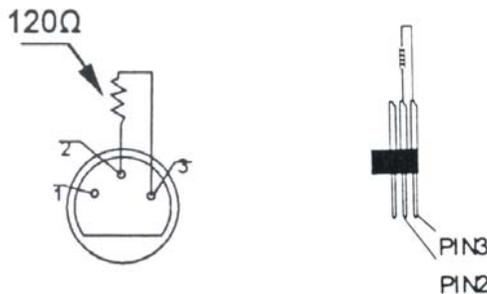
### DMX-512 control connection

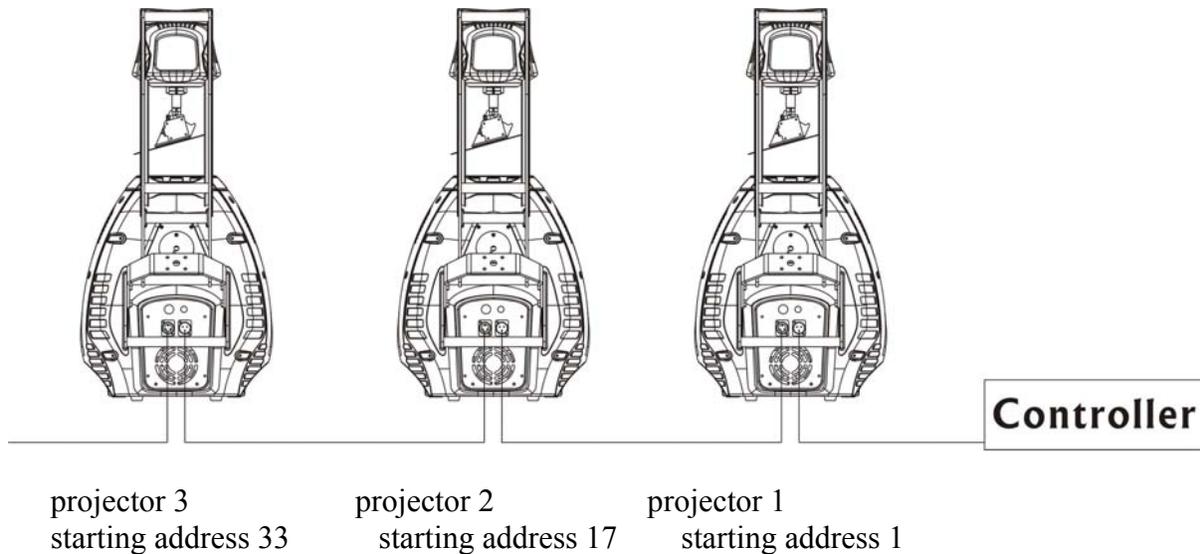
Connect the provided XLR cable to the female 3-pin XLR output of your controller and the other side to the male 3-pin XLR input of the moving head. You can chain multiple Moving head together through serial linking. The cable needed should be two core, screened cable with XLR input and output connectors.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



### DMX-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.





### ***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 scanner, which is a 16 channel fixture, you should set the starting address of the first unit to 1, the second unit to 17 (16 + 1), the third unit to 33 (17 + 16), and so on.

#### **Note:**

After switching on, the machine 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 flashes "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 machine.
- the controller is switched off or defective, if the cable or connector is defective or the signal wires are swap in the input connector.

### **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 Enter-button for 3 seconds until the display starts flashing. Browse through the menu by pressing the Up-button. Press the Enter-button in order to select the desired menu. You can change the selection by pressing the Up-button. Confirm every selection by pressing the Enter-button. You can leave every mode by pressing the Exit-button. The functions provided are described in the following sections.

Default settings shaded

0	ADDR	A001~A511		Indicate the starting DMX address A001 also is the setting for slave	
1	TEST	T-01~T-XX		Automatically test the function	
2	AUDI	MSTR		Runs fixture as “master” for audio	
		ALON		Runs fixture as “alone” for audio	
3	LAMP	ON/OFF		Manually switches lamp “on” and “off”	
4	RESE	ALL	ON/OFF	Reset all motors and returns fixture to home	
		SCAN	ON/OFF	Reset only motors for pan/tilt	
		COLR	ON/OFF	Reset only motors for colors	
		GOBO	ON/OFF	Reset only motors for gobo and rotation	
		SHTR	ON/OFF	Reset only motors for shutter and/or dimmer	
		OTHR	ON/OFF	Reset other motors	
5	TIME	LIFE	0000~9999	Displays the total fixture running time	
		LAMP	0000~9999	Displays a lamps running time	
		CLMP	ON/OFF	Clear lamp running time	
6	RPAN	ON/OFF		Reverses the pan movements	
7	RTLTL	ON/OFF		Reverses the tilt movements	
8	FINE	ON/OFF		Switch between 16 bit/8 bit	
9	DISP	VALU	D-XX D-00 (DXXX)	Display the DMX512 value of each channel	
		D ON	ON/OFF	Display turn off after 2mins	
		FLIP	ON/OFF	This function will reverse the display 180	
10	SPEC	LAAU	ON/OFF	Automatic lamp start with power	
		DLOF	ON/OFF	Switch lamp via DMX	
		DLAY	D-XX D-15	Lamp on delay time	
		SPOT	ON/OFF	Lamp optimization	
		DFSE	ON/OFF	Resets all the fixture functions to default	
		VER	V1.0~V9.9	Software version	
11	EDIT	STEP	S-01 ~S-48	Set the amount of your program	
		SCXX	C-01	01 XX(00~FFH)	
			:	:	
			C-30	30 XX(00~FFH)	
			TIME	T - XX(01~FFH)	
			CEDT	ON/OFF	
RUN	ON/OFF	Program test			

## Main functions

### ADDRESS MENU -

AO01 - A511 (Value) - This is where you set the DMX address of the unit.

### TEST MENU -

T-01 - T-XX (Test) - Tests the functions of each channel. There are eight channels, but only channels 1,2,3,4, and 6 can be

tested.

#### **AUDI MENU -**

MAST (Master) - Runs the unit as master in sound active mode.  
ALON (Alone) - Runs the unit stand alone, sound active mode.

#### **RESE (RESET) MENU -**

ALL - Resets all the motors in the unit.  
**SCAN- Reset the motors for pan/ tilt mirror movement**  
COLR (Color) - Resets the color motors.  
GOBO - Resets the gobo motors.  
SHTR - Resets the shutter motors.  
**OTHR-Reset other motors**

#### **TIME MENU -**

LIFE - Displays the fixtures total running time.  
LAMP - Displays the lamp running time.  
CLMP - Clears the lamp running time.

#### **REVERSE PAN -**

RPAN (Reverse Pan) - Reverses the pan.

#### **REVERSE TILT -**

RTILT (Reverse Tilt) - Reverses the tilt.

#### **FINE MENU-**

**Switch between 16 bit and 8 bit**

#### **DISPLAY MENU -**

VALU (DMX-512 Value) - Display the DMX-512 value of each channel.  
D ON (Display On) - Turns digital display on or off.  
FLIP - "Flips" the digital display 180 degree

#### **SPEC MENU -**

**LAAU-Automatic lamp start with power**  
**DLOF-Switch lamp via DMX controller**  
**DLAY-Lamp delay on time**  
SPOT - This provides a spot beam for better lamp optimization.  
REST (Reset) - Resets the unit to default.  
VER (Version) - Displays the software version

#### **EDIT MENU -**

RUN - This will run your own custom program.  
STEP (S-01 - S-48) - These are the steps slots that you write your programs into. There are a total of 48 steps.  
SCXX (SC01 - SC30) - These are the scenes that are stored in your program. There are a total of 30 scenes. C-01 - C-08 (Channel 1 - Channel 08) - The channels of each scene that can be edited. See page 27.  
TIME (Time) - Running time of the entire program. See page 27.  
CEDT - Edit program using a external controller. See page 29.

**On-Board System Menu.** The Accu Scan 250. comes with an easy to navigate system menu. This next section will detail the functions of each command in the system menu.

**Enter Button** - To access the main menu locate the MODE/ENTER button (4) on the front of the unit. Press this button to activate the system menu. Tap the UP button (12) until you reach function you wish to change. When you reach the function you wish to change tap the MODE/ENTER button. When a function is selected the menu will

begin to flash, use the UP button to change the function. Once your changes are made tap the MODE/ENTER button again to lock the change in the system. To exit without making any changes tap the EXIT button (12).

#### **ADDR MAIN MENU -**

##### **ADDR DMX Address Setting via control board -**

1. Access the main menu.
2. Tap the UP button until "ADDR" is displayed, press ENTER.
4. Now the display will show "A001". Adjust the DMX address by pressing the UP or DOWN buttons.
5. Press MODE/ENTER to confirm.
6. Press the EXIT button to return to the main menu.

***When the display is on "A001", you can directly press the UP or DN buttons to change the DMX start address.***

#### **TEST MAIN MENU -**

##### **TEST - This will test the functions of each channel.**

1. Access the main menu.
2. Tap the UP button until "TEST" is displayed, press ENTER.
3. The display will show "T-01". You can now press the up button and test the different channels. For example: If you press the up button until "T-03" is displayed, the unit will test the color channel, changing the color one by one and show the rainbow effect with different speeds. There are eight channels, but only channels 1,2,3,4, and 6 can be tested.
5. Press MODE/ENTER or EXIT to exit.

#### **AUDI MAIN MENU -**

##### **MSTR Define the unit as the master, in master/slave mode-**

1. Access the main menu.
2. Tap the UP button until "AUDI" is displayed, press MODE/ENTER.
3. Tap the UP button until "MSTR" is displayed, press MODE/ENTER.
4. Press EXIT to return to the main menu.

##### **ALON Define the unit as a stand alone unit -**

1. Access the main menu.
2. Tap the UP button until "NODE" is displayed, press ENTER.
3. Tap the UP button until "ALON" is displayed, press MODE/ENTER to confirm.
4. Press EXIT to return to the main menu.

#### **RESE MAIN MENU -**

##### **ALL - When you activate the reset function, the fixture will begin the reset motion.**

1. Access the main menu.
2. Tap the UP button until "RESE" is displayed, press MODE/ENTER.
3. Tap the UP button until "ALL" is displayed, press MODE/ENTER.
4. The display will show "ON/OFF". Press the UP button to select "ON" to reset the color motor.
5. Press MODE/ENTER to confirm
6. Press EXIT/DN to return to the main menu.

##### **SCAN - When you activate this reset function, the fixture will only reset the pan/tilt motor.**

1. Access the main menu.
2. Tap the UP button until "RESE" is displayed, press MODE/ENTER.
3. Tap the UP button until "SCAN" is displayed, press MODE/ENTER to confirm.
4. The display will show "ON/OFF". Press the UP button to select "ON" to reset the pan/tilt motor. Press MODE/ENTER to confirm.
5. Press EXIT/DN to return to the main menu.

##### **COLR - When you activate this reset function, the fixture will only reset the color wheel motor.**

1. Access the main menu.

2. Tap the UP button until "RESE" is displayed, press MODE/ENTER.
3. Tap the UP button until "COLR" is displayed, press MODE/ENTER to confirm.
4. The display will show "ON/OFF". Press the UP button to select "ON" to reset the color motor. Press MODE/ENTER
5. Press EXIT/DN to return to the main menu.

**GOBO - When you activate this reset function, the fixture will only reset the gobo wheel motor.**

1. Access the main menu.
2. Tap the UP button until "RESE" is displayed, press MODE/ENTER.
3. Tap the UP button until "GOBO" is displayed, press MODE/ENTER to confirm.
4. The display will show "ON/OFF". Press the UP button to select "ON" to reset the gobo motor. Press MODE/ENTER to confirm.
5. Press EXIT/DN to return to the main menu.

**SHTR - When you activate this reset function, the fixture will only reset the shutter/dimmer motor.**

1. Access the main menu.
2. Tap the UP button until "RESE" is displayed, press MODE/ENTER.
3. Tap the UP button until "SHTR" is displayed, press MODE/ENTER to confirm.
4. The display will show "ON/OFF". Press the UP button to select "ON" to restart the shutter/dimmer motor. Press MODE/ENTER to confirm.
5. Press EXIT/DN to return to the main menu.

**OTHR - When you activate this reset function, the fixture will only reset the other motors.**

1. Access the main menu.
2. Tap the UP button until "RESE" is displayed, press MODE/ENTER.
3. Tap the UP button until "OTHR" is displayed, press MODE/ENTER to confirm.
4. The display will show "ON/OFF". Press the UP button to select "ON" to reset the color motor. Press MODE/ENTER
5. Press EXIT/DN to return to the main menu.

**TIME MAIN MENU -**

**LIFE - With this function you can display the total running time of the unit.**

1. Access the main menu.
2. Tap the UP button until "TIME" is displayed, press MODE/ENTER.
3. Tap the UP button until "LIFE" is displayed, press MODE/ENTER.
4. Press EXIT to return to the main menu.

**LAMP - With this function you can display the running time of the lamp.**

1. Access the main menu.
2. Tap the UP button until "TIME" is displayed, press MODE/ENTER.
3. Tap the UP button until "LAMP" is displayed, press MODE/ENTER.
4. Press EXIT to return to the main menu.

**CLMP - With this function you can clear the running time of the lamp. Note Very Important: Please clear the lamp time every time you replace the lamp.**

1. Access the main menu.
2. Tap the UP button until "TIME" is displayed, press MODE/ENTER.
3. Tap the UP button until "CLMP" is displayed, press MODE/ENTER.
4. Press MODE/ENTER, the display will show "ON/OFF".
5. Press the UP button to select "ON" to activate this function, or "OFF" to deactivate this function.
6. Press MODE/ENTER to confirm.
7. Press EXIT/DN to return to the main menu.

**RPAN MAIN MENU -**

**RPAN - The movement of the Pan will be reversed.**

1. Access the main menu.
2. Tap the UP button until "RPAN" is displayed, press MODE/ENTER.
4. The display will show "ON/OFF".
5. Press the UP button to select "ON" to activate this function, or "OFF" to deactivate this function.
6. Press MODE/ENTER to confirm.
7. Press EXIT to return to the main menu.

**RTLT MAIN MENU -**

**RTLT - The movement of the Tilt will be reversed.**

1. Access the main menu.
3. Tap the UP button until "RTILT" is displayed, press MODE/ENTER.
4. The display will show "ON/OFF".
5. Press the UP button to select "ON" to activate this function, or "OFF" to deactivate this function.
6. Press MODE/ENTER to confirm.
7. Press EXIT to return to the main menu.

**FINE – Switch between 16 bit/ 8 bit resolution of movement.**

1. Access the main menu.
3. Tap the UP button until "FINE" is displayed, press MODE/ENTER.
4. The display will show "ON/OFF".
5. Press the UP button to select "ON" to activate this function, or "OFF" to deactivate this function.
6. Press MODE/ENTER to confirm.
7. Press EXIT to return to the main menu.

**DISP MAIN MENU -**

7. Press EXIT/DN to return to the main menu.

**RPAN MAIN MENU -**

**RPAN - The movement of the Pan will be reversed.**

1. Access the main menu.
2. Tap the UP button until "RPAN" is displayed, press MODE/ENTER.
4. The display will show "ON/OFF".
5. Press the UP button to select "ON" to activate this function, or "OFF" to deactivate this function.
6. Press MODE/ENTER to confirm.
7. Press EXIT to return to the main menu.

**RTILT MAIN MENU -**

**RTILT - The movement of the Tilt will be reversed.**

1. Access the main menu.
3. Tap the UP button until "RTILT" is displayed, press MODE/ENTER.
4. The display will show "ON/OFF".
5. Press the UP button to select "ON" to activate this function, or "OFF" to deactivate this function.
6. Press MODE/ENTER to confirm.
7. Press EXIT to return to the main menu.

**DISP MAIN MENU -**

7. Press EXIT to return to the main menu.

**FLIP - This function will reverse the display 180o.**

1. Access the main menu.
2. Tap the UP button until "DISP" is displayed.
3. Press MODE/ENTER, the display will show "ON/OFF".
4. Press the UP button to select "ON" to activate this function, or "OFF" to deactivate this function.
5. Press MODE/ENTER to confirm.
6. Press EXIT to return to the main menu.

### **SPEC MAIN MENU -**

**spot - 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. Access the main menu.
2. Tap the UP button until "ADJU" is displayed, press ENTER.
3. Tap the UP button until "LADJ" is displayed, press ENTER.
4. The display will show "ON/OFF".
5. Press the UP button to select "ON" to activate this function, or "OFF" to deactivate this function.
6. Press ENTER to confirm.
7. Press EXIT/DN to return to the main menu.

**DFSE - With this function you can restore the factory settings of the device. All settings will be set back to the default values. Any edited scenes will be lost. When restoring the factory settings the unit must be set to the address that the unit was in when you started editing.**

1. Access the main menu.
2. Tap the UP button until "SPEC" is displayed, press MODE/ENTER.
3. Tap the UP button until "DFSE" is displayed, press MODE/ENTER.
4. The display will show "ON/OFF".
5. Press the UP button to display "ON" to activate this function, or "OFF" to deactivate this function.
6. Press MODE/ENTER to confirm.
7. Press EXIT to return to the main menu.

***When you exit this function, the unit will begin to reload data.***

**VER - Use this function to display the Software version of the unit.**

1. Access the main menu.
2. Tap the UP button until "SPEC" is displayed, press MODE/ENTER.
3. Tap the UP button until "VER" is displayed, press MODE/ENTER.
4. The display will show "V-1.0", the display may also show, "V-2.0", "V-9.9" etc.
5. Press ENTER or EXIT/DN to exit. EDIT - This menu item allows you to write a program into the memory (EEPROM) via the control panel or via the external controller.

**RUN With the function "RUN", you can run your pre-made program. You can set the number of steps under Step (S-01- S-48). You can edit the individual scenes under Edit.**

1. Access the main menu.
2. Tap the UP button until "EDIT" is displayed, press MODE/ENTER.
3. Tap the UP button until "RUN" is displayed, press MODE/ENTER.
4. "AUTO" is displayed. If you press the UP button it will show "SOUN". Select which one you want to activate, and press ENTER.
5. Press UP, to select "ALON" or "NAST". Which mean stand alone, and master/slave mode.
6. Select a mode, and press ENTER to confirm.
7. Press EXIT/DN to return to the main menu.

**STEP - With this function you can program the number of steps in your individual Program.**

1. Access the main menu.
2. Tap the UP button until "EDIT" is displayed, press ENTER.
3. Tap the UP button until "STEP" is displayed, press ENTER.
4. The display shows "S-01", this stands for the first step of your program. You can call up to 48 scenes in "Run". For example, if "S-05" is displayed, it means that "Run" will run the first 5 scenes you saved in "Edit".
5. Press ENTER to save and exit.

**SC01 - With this function you can choose the number of scenes in your Program.**

1. Access the main menu.
2. Tap the UP button until "EDIT" is displayed, press MODE/ENTER.

3. Tap the UP button until "SC01" is displayed.
4. The display shows "SC01", this stands for the first scene of your program. You can call up to 30 scenes. For example, if "SC05", it means that "Run" will run the first 5 scenes you saved in "Edit".
5. Press ENTER to save and exit.

***Editing procedure 1: Using the control board only.***

1. Access the main menu.
2. Tap the UP button until "EDIT" is displayed. Press MODE/ENTER.
3. The display will show "SC-01", this stands for the scene number. For example, "SC-01" is displayed, it means you will be editing scene 1, press MODE/ENTER. You can change the scene number by pressing the UP button.
4. Press MODE/ENTER, the display will show "C-1", this stands for the channel number. If "C-01" is displayed, you will be editing channel 1 of your selected scene, press MODE/ENTER. You can change the channel number by pressing the UP button.
5. The display will show the DMX value for the channel that is being edited. It will be displayed as "11XX", it stands for Channel 11 of the editing scene, the DMX value is "XX".
6. Adjust the DMX value by pressing the UP button, until you get the expected effect for this channel.
7. Press MODE/ENTER to enter the editing of the other channels of the scene.
8. Repeat steps 5-8, until you finish setting all the DMX values for all the channels of this scene, each scene can have 15 channels maximum.
9. Once all the channels are completed, the display will show "TIME", this stands for the time needed to run this scene.
10. Press MODE/ENTER to edit the time needed, the display shows "T-XX", "XX" stands for the time needed to run this scene. For example, "T-02" means scene 1 needs 6 seconds to run, "T-15" means this scene needs 45 seconds to run.

***Note: "XX" is always three seconds not one second.***

11. Adjust the time needed by pressing the UP button.
12. Press MODE/ENTER to save the settings for the scene you are editing, the display will change to the next scene automatically.
13. Repeat steps 3-12 to edit other scenes, you can edit and save 48 scenes maximum.
14. Press EXIT to exit, now you have edited and saved scenes using the control board. The number of steps can be defined under "EDIT" and the scenes can be called up under "Run". To run the scenes see page 26.

***Editing procedure 2: Using an external controller.***

1. Access the main menu.
2. Tap the UP button until "EDIT" is displayed. Press MODE/ENTER.
3. The display will show "SC01", this stands for the first scene number to be edited. For example: If "SC01" is displayed, you will be editing scene 1.
4. Change the scene number by pressing the UP button.
5. Press MODE/ENTER, the display will show "C-01", the "1" stands for the channel number 1.
6. Press the UP button until "CEDT" is displayed, press MODE/ENTER.
7. The display will show "OFF", press the UP button so that "ON" is displayed, press MODE/ENTER.
8. The display shows "SC02". You have successfully downloaded the .rst scene.
9. Adjust the Step-time. needed by pressing the UP button.
10. Call up the second scene in your controller now.
11. Repeat steps 3-6 until all desired scenes are downloaded.
12. Press EXIT to exit. The number of steps can be defined under "Step" and the scenes can be called up under "Run".

**INSTRUCTIONS ON USE:**

The moving head is controlled by 16 DMX channels :

**DMX channel's functions and their values :**

**Channel 1 - PAN movement 8bit :**

**Channel 2 – Pan fine**

**Channel 3 - TILT movement 8bit :**

**Channel 4 – Tilt fine**

**Channel 5 - Color Wheel :**

0-13	Open / white
14-27	Red
28-41	Blue
42-55	Green
56-69	Light Yellow
70-83	Magenta
84-97	Orange
98-111	Purple
112-128	Pink
128-187	Forwards rainbow effect from fast to slow
188-193	No rotation
194-255	Backwards rainbow effect from slow to fast

**Channel 6 - Rotating gobos, cont. rotation**

0-9	Open
10-19	Rot. gobo 1
20-29	Rot. gobo 2
30-39	Rot. gobo 3
40-49	Rot. gobo 4
50-59	Rot. gobo 5
60-69	Rot. gobo 6
70-89	Gobo 1 shake slow to fast
90-109	Gobo 2 shake slow to fast
110-129	Gobo 3 shake slow to fast
130-149	Gobo 4 shake slow to fast
150-169	Gobo 5 shake slow to fast
170-189	Gobo 6 shake slow to fast
190-255	Rot. gobo wheel cont. rotation slow to fast

**Channel 7 - Rotating gobo index, rotating gobo rotation**

0-127	Gobo indexing
128-187	Forwards gobo rotation from fast to slow
188-193	No rotation

194-255 Backwards gobo rotation from slow to fast

**Channel 8 - Fixed Gobos :**

0-13 Open/hole  
14-27 Gobo 1  
28-41 Gobo 2  
42-55 Gobo 3  
56-69 Gobo 4  
70-83 Gobo 5  
84-97 Gobo 6  
98-111 Gobo 7  
112-127 Gobo 1 shake slow to fast  
128-143 Gobo 2 shake slow to fast  
144-159 Gobo 3 shake slow to fast  
160-175 Gobo 4 shake slow to fast  
176-191 Gobo 5 shake slow to fast  
192-207 Gobo 6 shake slow to fast  
208-223 Gobo 7 shake slow to fast  
224-255 Gobo wheel rotation from slow to fast

**Channel 9 - 3 facet rotating prism, Prism / Gobo macros:**

0-3 open  
4-63 Forwards rotation from fast to slow  
64-67 No rotation  
68-127 Backwards rotation from slow to fast  
128-135 Macro 1  
136-143 Macro 2  
144-151 Macro 3  
152-159 Macro 4  
160-167 Macro 5  
168-175 Macro 6  
176-183 Macro 7  
184-191 Macro 8  
192-199 Macro 9  
200-207 Macro 10  
208-215 Macro 11  
216-223 Macro 12  
224-231 Macro 13  
232-239 Macro 14  
240-247 Macro 15  
248-255 Macro 16

### **Channel 10 – Focus & Zoom**

0-85	Zoom1 & Continuous adjustment from far to near
86-171	Zoom2 & Continuous adjustment from far to near
172-255	Zoom3 & Continuous adjustment from far to near

### **Channel 11 - 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 12 - Dimmer (intensity)**

0-255	Intensity 0 to 100%
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### **Channel 13 – Iris**

0-191	Max. diameter to Min.diameter
192-223	Pulse closing fast to slow
224-255	Pulse opening slow to fast

### **Channel 14 –Frost**

0-191	Frost 0-100%
192-223	Pulse closing fast to slow
224-255	Pulse opening slow to fast

### **Channel 15 - Speed pan/tilt movement:**

0-4	max speed
5-225	max to min speed
226-235	blackout by movement
236-245	blackout by all wheel changing
246-255	no function

### **Channel 16 – Lamp on/off, reset, internal programs:**

0-19	colour change normal
20-39	colour change to any position
40-59	Lamp on
60-79	Lamp switch off
80-84	All motor reset
85-87	Scan motor reset

88-90	Colors motor reset
91-93	Gobos motor reset
94-96	Shutter & Dimmer motor reset
97-99	Other 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	Auto program by music

## 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.



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 :*

□98VAC,50Hz;□120VAC, 50Hz;□208VAC, 50Hz;□220VAC,50Hz;□230VAC,50Hz;□240VAC, 50Hz;  
 □98VAC,60Hz;□120VAC,60Hz; □208VAC, 50Hz;□220VAC,60Hz;□230VAC,60Hz;□240VAC,60Hz;

*Power consumption :* max. □**1000W**

*Lamp :* **MSR 575/2, 6500k**

*Motors :* 13 micro motors

*Net weight :* □32KGS;

**Packing dimensions :** 92x48x43cm

Gross weight: □36KGS;

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

