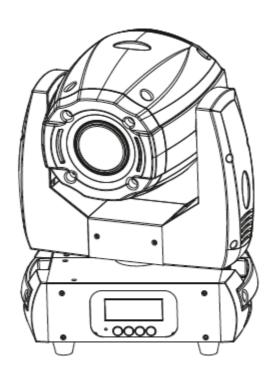
ig<u>nition</u>

Manual



LED Compact Spot CS-150



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1. Safety instructions



- This device is suitable for indoor use (not outdoors) only.
- All modifications to the device will void the warranty.
- Repairs are to carry out by skilled personnel only.
- Use only fuses of the same type and original parts as spare parts.
- Protect the unit from rain and humidity to avoid fire and electric shocks.
- Make sure to unplug the power supply before opening the housing.

1.1. For safe and efficient operation

Be careful with heat and extreme temperature

Avoid exposing it to direct rays of the sun or near a heating appliance. Not put it in a temperature bellow 32°F /0°C, or exceeding 104°F /40°C.

Keep away from humidity, water and dust

Do not place the set in a location with high humidity or lots of dust. Containers with water should not be placed on the set.

To avoid placing on un-stable location

Select a level and stable location to avoid vibration.

Do not use chemicals or volatile liquids for cleaning

Use a clean dry cloth to wipe off the dust, or a wet soft cloth for stubborn dirt.

If out of work, contact sales agency immediately

Any troubles arose, remove the power plug soon, and contact with an engineer for repairing, do not open the cabinet by yourself, it might result a danger of electric shock.

Take care with the power cable

Never pull the power cable to remove the plug from the receptacle, be sure to hold the plug. When not using the device for an extended period of time, be sure to disconnect the plug from the receptacle.

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. Make sure the electrical connection is carried out by qualified personnel. All electrical and mechanical connections have to be carried out according to the European safety standards.



2. Designated use

This device was developed for professional use on stages, in discos, theatres etc. The device is only approved for a connection up to 230V 50/60 Hz AC voltage and only for indoor use.

Regular breaks during operation increase the lifetime of your device.

Avoid convulsions or any form of forceful impact during the installation or the start-up of the device.

Make sure that the device is not exposed excessive heat, humidity or dust at the place of installation. Take care that no cables are lying around. You would endanger your own safety and also the safety of a third party.

It is not allowed to operate or store the device in an environment in which spray water, rain, humidity or fog is expected. Humidity or very high atmospheric humidity could reduce the isolation of the device and could cause deathly electric shocks. If you use fog devices the device has not be exposed to a direct smoke jet. There has to be a safety distance of at least 0,5m between this device and the fog machine. Make sure that the saturation of the fog has to enable a visibility of at least 10m.

Operate the device not during thunderstorms. Surge voltages could destroy the device. Unplug the power supply during thunderstorms.

During the installation the use of the mounting bracket is obligatory.

Surrounding objects or surfaces should not be in contact with the device. And make sure that there is a distance of at least 0,2m between the lenses and illuminated objects.

Make sure that during the installation and removal of the device the area below the place of installation is basically cordoned off. This also applies to implementation of service.

The device has basically been protected by a suitable safety.

Make familiar yourself with the functions of the device before start-up. People without the experience should not handle with the device. The most cause of functional disorder is inappropriate handling.

Do not use chemicals or volatile liquids for cleaning. Use a clean dry cloth to wipe off the dust, or a wet soft cloth for stubborn dirt.

For transport use the original packing or designated accessory to avoid damages during the transport.

For reasons of safety unauthorized changes are forbidden.

A usage of the device which differs from usages which are described in this manual can cause damages of the device. In that case the warranty expires. Additional you should notice that every differed usage is related with dangers and can cause e.g. an electrical short, fire, electric shock or crash.



2.1. Overhead installation



Danger of life!

You have to observe the regulations of BGV C1 (formerly VBG 70) and EN60598-2-17 Installations are to carry out by skilled personnel only.

The suspension devices have to be build and measured so they can withstand for an hour the tenfold of the payload without suffering a permanent detrimental deformation.

Basically installation has to be made by using a second separate suspension. This can be e.g. a suitable net. The second suspension must be designed and attached so no part of the installation can fall down in case of failure.

During construction, reconstruction and deconstruction unnecessary stay in the range of moving areas, on lightning bridges, under elevated work stations or any other danger zones is forbidden.

The operator is obliged to following safety-related and mechanical facilities:

- Before the first start-up or after critical changes before restarting it has to be checked by an expert.
- Review in the frame of the inspection test at least all four years by an expert. .
- Review by a qualified person at least once a year.

How to carry out the overhead installation:

In tidal fall you should install the device out of the lounge area of people

IMPORTANT! Overhead installation requires a high level of experience. This includes knowledge of calculating the payload, used installation material and safety inspections of the used material and the projector whereas the required experience is not limited to this. Do not try to carry out installation yourself under any circumstances if you are not qualified. Contact a professional installer. An inappropriate installation can lead to injuries and/or damaged properties.

It is not allowed to install the device in the grip area of people.

If the device may hang from the ceiling or from high beams, the use of truss systems is mandatory. The device may not be installed so it can swing freely in the room.

Please note: Crashing down items can cause serious injuries! Do not install the projector, if you doubt the safety of a possible installation form!

Before installation make sure that the mounting surface has the ability to carry the tenfold point load of the own weight of the device.

Mount the device with the mounting-bracket to your trussing system using an appropriate clamp.

During overhead installation the device must be always secured by a safety rope which is designed to hold the twelvefold weight of device. Only safety ropes with quick-release safety fastener elements may be used. Hang up the safety rope in the hole of the mounting bracket. Direct the rope over the truss or an appropriate fastening point. Hang up the end in the fastening element and tie up the locking nut. A safety rope once exposed to failing load or damaged may not be used furthermore.



The maximum drop exceed must not exceed 20cm.

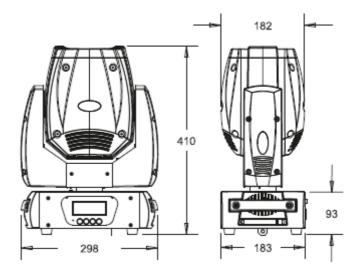
A safety rope once exposed to failing load or damaged may not be used furthermore. Adjust the desired inclination angle via the mounting bracket and tighten the screw.



3. Introduction

Thank you for buying the **LED Compact Spot CS-150**. It is a powerful device. For a successful installation and operation, please read this manual carefully.

3.1. Dimensions





4. Connections

4.1. Electrical connections

If you wish to change the power supply settings, see the chapter Appendix. Connect the fixture to the mains with the enclosed power cable and plug. The earth has to be connected.

| Cable (EU) | Cable (US) | Pin | International |
|--------------|------------|---------|---------------|
| Brown | Black | Live | L |
| Light blue | White | Neutral | N |
| Yellow/Green | Green | Earth | • |

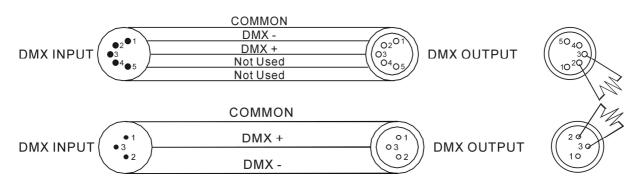
4.2. DMX connections

To make a DMX512 connection go ahead like it is described in the picture. Make sure that you use shielded cable. 3pole or 5pole XLR cables are suitable.

Important! After the last device the line has to be terminated. In order to do this you have to solder a 120Ω resistor between the pins Data + and Data -. You can solder this end resistor on a 3pin or 5pin XLR: Plug this adapter into the DMX output of the device.

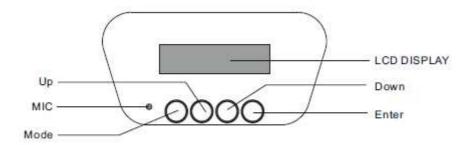
4.3. DMX connection with terminator

Where the DMX cable has to run a long distance or the equipment is operated in an electrically noisy environment like a disco for installations, we recommend using a DMX terminator. This prevents corruption of the digital control signal by electrical noise. The DMX terminator is simply an XLR connector with a 120 Ω resistor between pins 2 and 3, which is then plugged into the XLR output socket of the last device in the series. Please look to the bottom drawings.





5. Control



Press MODE to get to the menu. With UP/DOWN you can select the required point of menu. Confirm your selection with ENTER. With UP/DOWN you can make your settings after this confirm your settings with ENTER.

5.1. Structure of the menu

| Menu | Submenu 1 | Submenu 2 | Submenu 3 | Function |
|--------------------|-------------------|-------------|-----------|---|
| DMX Address | A001 – A512 | | | Setting the DMX address. |
| Auto Play | Auto Program | Master / | | Choosing the run mode and (de-) |
| , idio : id, | Music Control | Alone | | activating the Master-Slave mode. |
| | ALL Reset | | | Reset of all motors. |
| | Scan Reset | | | Reset the scan function. |
| | Color Reset | | | Reset the colors. |
| Reset | GOBO Reset | | | Reset the gobos. |
| | Dimmer Reset | | | Reset the dimmer and the strobe. |
| | Other Reset | | | Reset of all other functions. |
| Reverse Pan | On / Off | | | (De-)Activates the inverted Pan. |
| Reverse Tilt | On / Off | | | (De-)Activates the inverted Tilt. |
| Mic sensitivity | 0 – 99% | | | Setting the sensitivity of the microphone. |
| | Reset Default | On / Off | | Reset to default. |
| | | PAN | | |
| | | TILT | | Calibrates the veen active to mation |
| | Calibration | Color Wheel | | Calibrates the respective function. For this you need to enter a |
| | Calibration | Gobo Wheel | | password (008). |
| Special | | Focus | | F 300 11 (000). |
| | | Prism | | |
| | Temperature | | | Shows the current temperature. |
| | Manual Control | | | Manual control of all functions. |
| | Signal Set | Wire DMX | | Wired DMX. |
| | Olgilai Oct | Wireless | | Wireless DMX |



| | | DMX | | |
|-----------------|------------------|------------------------|-------------------------|--|
| | | Act WDMX & Out | | Input Wireless DMX and output wired DMX. |
| Edit Program | Auto | Program1 – Program8 | Steps 1 - Steps48 | Here you can create a customer |
| Luit F Togram | Auto | | Scenes01 – Scenes XX | program. |
| Mar In a C | Standard Mode | | | |
| Mode of channel | Basic Mode | | | Choosing a DMX mode. |
| CHAINCI | Extended Mode | | | |
| | | 630 | | Pan 630° |
| | PAN Degree | 540 | | Pan 540° |
| Select | | 360 | | Pan 360° |
| Degree | | 270 | | Tilt 270° |
| | TILT Degree | 180 | | Tilt 180° |
| | | 90 | | Tilt 90° |
| Version | | | | Shows the current software version. |



6. DMX chart

6.1. DMX modus Standard (14 channel)

| 1 0 255 Pan 2 0 255 Pan fine 3 0 255 Tilt 4 0 255 Tilt fine 0 15 White 16 31 Color 1 32 47 Color 2 48 63 Color 3 64 79 Color 4 5 80 95 Color 5 96 1111 Color 6 112 127 Color 7 128 189 Color change clockwise fast – slow 190 193 Stop 194 255 Color change counter clockwise slow – fast 0 9 Open 10 19 Gobo 1 20 29 Gobo 2 30 39 Gobo 3 40 49 Gobo 6 | Channel | Value from | Value to | Function |
|---|---------|------------|----------|--|
| 3 0 255 Tilt 4 0 255 Tilt fine 0 15 White 16 31 Color 1 32 47 Color 2 48 63 Color 3 64 79 Color 4 5 80 95 Color 5 96 111 Color 6 112 127 Color 7 128 189 Color change clockwise fast – slow 190 193 Stop 194 255 Color change counter clockwise slow – fast 0 9 Open 10 19 Gobo 1 20 29 Gobo 2 30 39 Gobo 3 40 49 Gobo 4 50 59 Gobo 5 60 Gobo 6 | 1 | 0 | 255 | Pan |
| 4 0 255 Tilt fine 0 15 White 16 31 Color 1 32 47 Color 2 48 63 Color 3 64 79 Color 4 5 80 95 Color 5 96 111 Color 6 112 127 Color 7 128 189 Color change clockwise fast – slow 190 193 Stop 194 255 Color change counter clockwise slow – fast 0 9 Open 10 19 Gobo 1 20 29 Gobo 2 30 39 Gobo 3 40 49 Gobo 4 50 59 Gobo 5 60 69 Gobo 6 | 2 | 0 | 255 | Pan fine |
| 0 15 White 16 31 Color 1 32 47 Color 2 48 63 Color 3 64 79 Color 4 5 80 95 Color 5 96 111 Color 6 112 127 Color 7 128 189 Color change clockwise fast – slow 190 193 Stop 194 255 Color change counter clockwise slow – fast 0 9 Open 10 19 Gobo 1 20 29 Gobo 2 30 39 Gobo 3 40 49 Gobo 4 50 59 Gobo 5 | 3 | 0 | 255 | Tilt |
| 16 31 Color 1 32 47 Color 2 48 63 Color 3 64 79 Color 4 5 80 95 Color 5 96 111 Color 6 112 127 Color 7 128 189 Color change clockwise fast – slow 190 193 Stop 194 255 Color change counter clockwise slow – fast 0 9 Open 10 19 Gobo 1 20 29 Gobo 2 30 39 Gobo 3 40 49 Gobo 4 50 59 Gobo 5 | 4 | 0 | 255 | Tilt fine |
| 32 47 Color 2 48 63 Color 3 64 79 Color 4 5 80 95 Color 5 96 111 Color 6 112 127 Color 7 128 189 Color change clockwise fast – slow 190 193 Stop 194 255 Color change counter clockwise slow – fast 0 9 Open 10 19 Gobo 1 20 29 Gobo 2 30 39 Gobo 3 40 49 Gobo 4 50 59 Gobo 5 60 Gobo 6 | | 0 | 15 | White |
| 48 63 Color 3 64 79 Color 4 5 80 95 Color 5 96 111 Color 6 112 127 Color 7 128 189 Color change clockwise fast – slow 190 193 Stop 194 255 Color change counter clockwise slow – fast 0 9 Open 10 19 Gobo 1 20 29 Gobo 2 30 39 Gobo 3 40 49 Gobo 4 50 59 Gobo 5 60 69 Gobo 6 | | 16 | 31 | Color 1 |
| 5 80 95 Color 4 80 95 Color 5 96 111 Color 6 112 127 Color 7 128 189 Color change clockwise fast – slow 190 193 Stop 194 255 Color change counter clockwise slow – fast 0 9 Open 10 19 Gobo 1 20 29 Gobo 2 30 39 Gobo 3 40 49 Gobo 4 50 59 Gobo 5 60 Gobo 6 | | 32 | 47 | Color 2 |
| 5 80 95 Color 5 96 111 Color 6 112 127 Color 7 128 189 Color change clockwise fast – slow 190 193 Stop 194 255 Color change counter clockwise slow – fast 0 9 Open 10 19 Gobo 1 20 29 Gobo 2 30 39 Gobo 3 40 49 Gobo 4 50 59 Gobo 5 60 69 Gobo 6 | | 48 | 63 | Color 3 |
| 96 111 Color 6 112 127 Color 7 128 189 Color change clockwise fast – slow 190 193 Stop 194 255 Color change counter clockwise slow – fast 0 9 Open 10 19 Gobo 1 20 29 Gobo 2 30 39 Gobo 3 40 49 Gobo 4 50 59 Gobo 5 60 69 Gobo 6 | | 64 | 79 | Color 4 |
| 112 127 Color 7 128 189 Color change clockwise fast – slow 190 193 Stop 194 255 Color change counter clockwise slow – fast 0 9 Open 10 19 Gobo 1 20 29 Gobo 2 30 39 Gobo 3 40 49 Gobo 4 50 59 Gobo 5 60 69 Gobo 6 | 5 | 80 | 95 | Color 5 |
| 128 | | 96 | 111 | Color 6 |
| 190 193 Stop 194 255 Color change counter clockwise slow – fast 0 9 Open 10 19 Gobo 1 20 29 Gobo 2 30 39 Gobo 3 40 49 Gobo 4 50 59 Gobo 5 60 69 Gobo 6 | | 112 | 127 | Color 7 |
| 194 255 Color change counter clockwise slow – fast 0 9 Open 10 19 Gobo 1 20 29 Gobo 2 30 39 Gobo 3 40 49 Gobo 4 50 59 Gobo 5 60 69 Gobo 6 | | 128 | 189 | Color change clockwise fast – slow |
| 0 9 Open 10 19 Gobo 1 20 29 Gobo 2 30 39 Gobo 3 40 49 Gobo 4 50 59 Gobo 5 60 69 Gobo 6 | | 190 | 193 | Stop |
| 10 19 Gobo 1 20 29 Gobo 2 30 39 Gobo 3 40 49 Gobo 4 50 59 Gobo 5 60 69 Gobo 6 | | 194 | 255 | Color change counter clockwise slow – fast |
| 20 29 Gobo 2 30 39 Gobo 3 40 49 Gobo 4 50 59 Gobo 5 60 69 Gobo 6 | | 0 | 9 | Open |
| 30 39 Gobo 3 40 49 Gobo 4 50 59 Gobo 5 60 69 Gobo 6 | | 10 | 19 | Gobo 1 |
| 40 49 Gobo 4 50 59 Gobo 5 60 69 Gobo 6 | | 20 | 29 | Gobo 2 |
| 50 59 Gobo 5 60 69 Gobo 6 | | 30 | 39 | Gobo 3 |
| 60 69 Gobo 6 | | 40 | 49 | Gobo 4 |
| 60 Gobo 6 | | 50 | 59 | Gobo 5 |
| R | 6 | 60 | 69 | Gobo 6 |
| 70 Sobo 1 Shake slow – fast | O | 70 | 89 | Gobo 1 Shake slow – fast |
| 90 Gobo 2 Shake slow - fast | | 90 | 109 | Gobo 2 Shake slow - fast |
| 110 Gobo 3 Shake slow – fast | | 110 | 129 | Gobo 3 Shake slow – fast |
| 130 Gobo 4 Shake slow – fast | | 130 | 149 | Gobo 4 Shake slow – fast |
| 150 Gobo 5 Shake slow – fast | | 150 | 169 | Gobo 5 Shake slow – fast |
| 170 Gobo 6 Shake slow – fast | | 170 | 189 | Gobo 6 Shake slow – fast |
| 190 255 Rotation Gobo wheel slow – fast | | 190 | 255 | Rotation Gobo wheel slow – fast |
| 0 No function | | 0 | 3 | No function |
| 7 Rotation gobo clockwise fast – slow | 7 | 4 | | Rotation gobo clockwise fast – slow |
| 128 Stop | , | | 131 | • |
| 132 255 Rotation counter clockwise slow – fast | | 132 | | Rotation counter clockwise slow – fast |
| 0 Open | | 0 | 9 | |
| 10 19 Gobo 1 | | 10 | 19 | Gobo 1 |
| 20 Gobo 2 | | | | |
| 8 Gobo 3 | 8 | | | |
| 40 49 Gobo 4 | Ŭ | 40 | 49 | Gobo 4 |
| 50 Gobo 5 | | 50 | 59 | Gobo 5 |
| 60 Gobo 6 | | 60 | 69 | Gobo 6 |
| 70 Gobo 7 | | 70 | 79 | Gobo 7 |



| | 80 | 89 | Gobo 8 |
|-----|-----|-----|---|
| | 90 | 99 | Gobo 9 |
| | 100 | 109 | Gobo 10 |
| | 110 | 119 | Gobo 11 |
| | 120 | 129 | Gobo 1 Shake slow – fast |
| | 130 | 139 | Gobo 2 Shake slow – fast |
| | 140 | 149 | Gobo 3 Shake slow – fast |
| | 150 | 159 | Gobo 4 Shake slow – fast |
| | 160 | 169 | Gobo 5 Shake slow – fast |
| | 170 | 179 | Gobo 6 Shake slow – fast |
| | 180 | 189 | Gobo 7 Shake slow – fast |
| | 190 | 199 | Gobo 8 Shake slow – fast |
| | 200 | 209 | Gobo 9 Shake slow – fast |
| | 210 | 219 | Gobo 10 Shake slow – fast |
| | 220 | 229 | Gobo 11 Shake slow – fast |
| | 230 | 255 | Rotation Gobo wheel slow – fast |
| | 0 | 31 | Shutter closed |
| | 32 | 63 | Shutter open |
| | 64 | 95 | Strobe slow – fast |
| | 96 | 127 | Shutter open |
| 9 | 128 | 159 | Pulse effect slow – fast |
| | 160 | 191 | Shutter open |
| | 192 | 223 | Strobe (Random) slow – fast |
| | 224 | 255 | Shutter open |
| 10 | 0 | 255 | Dimmer 0 – 100% |
| 11 | 0 | 255 | Focus |
| | 0 | 5 | No function |
| | 6 | 127 | Prism |
| 12 | 128 | 255 | Rotation Prism slow – fast |
| | 0 | 5 | No function |
| | 6 | 127 | Prism |
| | 0 | 225 | Pan / Tilt speed fast – slow |
| 40 | 226 | 235 | Blackout while movements. |
| 13 | 236 | 245 | Blackout while movements of color and gobo wheel. |
| | 246 | 255 | No function |
| | 0 | 79 | No function |
| | 80 | 84 | Reset of all motors |
| | 85 | 87 | #Reset scan motor |
| | 88 | 90 | Reset color motor |
| 4.4 | 91 | 93 | Reset gobo wheel motor |
| 14 | 94 | 96 | Reset dimmer and strobe motor |
| | 97 | 99 | Reset of all other motors |
| | 100 | 119 | Automatic program 1 |
| | 120 | 139 | Automatic program 2 |
| | 140 | 159 | Automatic program 3 |
| | | | 1 0 |



| 160 | 179 | Automatic program 4 |
|-----|-----|---------------------|
| 180 | 199 | Automatic program 5 |
| 200 | 219 | Automatic program 6 |
| 220 | 239 | Automatic program 7 |
| 240 | 255 | Sound-to-light mode |

6.2. DMX mode Basic (12 channel)

| 1 0 255 Pan 2 0 0 255 Tilt 0 15 White 16 31 Color 1 32 47 Color 2 48 63 Color 3 64 79 Color 4 3 80 95 Color 5 96 111 Color 6 112 127 Color 6 112 127 Color change clockwise fast – slow 190 193 Stop 194 255 Color change counter clockwise slow – fast 0 9 Open 10 19 Gobo 1 20 29 Gobo 2 30 39 Gobo 3 40 49 Gobo 4 50 59 Gobo 5 60 69 Gobo 6 70 89 Gobo 6 70 89 Gobo 2 Shake slow – fast 110 129 Gobo 4 Shake slow – fast 150 169 Gobo 5 Shake slow – fast 150 169 Gobo 5 Shake slow – fast 170 189 Gobo 6 Shake slow – fast 170 Rotation Gobo wheel slow – fast 18 131 Stop 132 255 Rotation Gobo wheel slow – fast 190 9 Open 10 19 Gobo 1 | Channel | Value from | Value to | Function |
|--|---------|------------|----------|--|
| 15 | 1 | 0 | 255 | Pan |
| 16 31 Color 1 32 47 Color 2 48 63 Color 3 64 79 Color 4 80 95 Color 5 96 111 Color 6 1112 127 Color 7 128 189 Color change clockwise fast – slow 190 193 Stop 194 255 Color change counter clockwise slow – fast 0 9 Open 10 19 Gobo 1 20 29 Gobo 2 30 39 Gobo 3 40 49 Gobo 4 50 59 Gobo 6 70 89 Gobo 1 Shake slow – fast 90 109 Gobo 2 Shake slow – fast 110 129 Gobo 3 Shake slow – fast 110 129 Gobo 3 Shake slow – fast 110 129 Gobo 5 Shake slow – fast 110 129 Gobo 5 Shake slow – fast 110 129 Gobo 5 Shake slow – fast 150 169 Gobo 5 Shake slow – fast 150 169 Gobo 5 Shake slow – fast 170 189 Gobo 6 Shake slow – fast 170 189 Gobo 6 Shake slow – fast 170 189 Gobo 6 Shake slow – fast 170 Rotation Gobo wheel slow – fast 180 3 No function 190 255 Rotation Gobo wheel slow – fast 128 131 Stop 132 255 Rotation counter clockwise slow – fast 0 9 Open 10 19 Gobo 1 | 2 | 0 | 255 | Tilt |
| 32 47 Color 2 48 63 Color 3 64 79 Color 4 3 80 95 Color 5 96 1111 Color 6 1112 127 Color 7 128 189 Color change clockwise fast – slow 190 193 Stop 194 255 Color change counter clockwise slow – fast 0 9 Open 10 19 Gobo 1 20 29 Gobo 2 30 39 Gobo 3 40 49 Gobo 4 50 59 Gobo 5 60 69 Gobo 6 70 89 Gobo 1 Shake slow – fast 90 109 Gobo 2 Shake slow – fast 110 129 Gobo 3 Shake slow – fast 110 129 Gobo 3 Shake slow – fast 110 129 Gobo 5 Shake slow – fast 150 169 Gobo 5 Shake slow – fast 170 189 Gobo 6 Shake slow – fast 170 Rotation Gobo wheel slow – fast 18 131 Stop 132 255 Rotation Counter clockwise slow – fast 0 9 Open 10 19 Gobo 1 | | 0 | 15 | White |
| 48 63 Color 3 64 79 Color 4 79 Color 4 80 95 Color 5 96 111 Color 6 112 127 Color 7 128 189 Color change clockwise fast – slow 190 193 Stop 194 255 Color change counter clockwise slow – fast 0 9 Open 10 19 Gobo 1 20 29 Gobo 2 30 39 Gobo 3 40 49 Gobo 4 50 59 Gobo 5 60 69 Gobo 6 70 89 Gobo 1 Shake slow – fast 110 129 Gobo 1 Shake slow – fast 130 149 Gobo 4 Shake slow – fast 130 149 Gobo 4 Shake slow – fast 150 169 Gobo 5 Shake slow – fast 170 189 Gobo 6 Shake slow – fast 170 189 Gobo 1 Shake slow – fast 181 Stop 182 255 Rotation gobo clockwise fast – slow 183 131 Stop 194 Gobo 2 195 Gobo 2 | | 16 | 31 | Color 1 |
| Section | | 32 | 47 | Color 2 |
| Section 10 Sec | | 48 | 63 | Color 3 |
| 96 111 Color 6 112 127 Color 7 128 189 Color change clockwise fast – slow 190 193 Stop 194 255 Color change counter clockwise slow – fast 0 9 Open 10 19 Gobo 1 20 29 Gobo 2 30 39 Gobo 3 40 49 Gobo 4 50 59 Gobo 5 60 69 Gobo 6 70 89 Gobo 1 Shake slow – fast 90 109 Gobo 2 Shake slow – fast 110 129 Gobo 3 Shake slow – fast 130 149 Gobo 4 Shake slow – fast 150 169 Gobo 5 Shake slow – fast 170 189 Gobo 6 Shake slow – fast 181 Stop 132 255 Rotation Gobo wheel slow – fast 133 Stop 134 Gobo 1 135 Gobo 1 136 Gobo 1 137 Gobo 1 138 Gobo 1 139 Gobo 1 | | 64 | 79 | Color 4 |
| 112 | 3 | 80 | 95 | Color 5 |
| 128 | | 96 | 111 | Color 6 |
| 190 193 Stop 194 255 Color change counter clockwise slow – fast 0 9 Open 10 19 Gobo 1 20 29 Gobo 2 30 39 Gobo 3 40 49 Gobo 4 50 59 Gobo 5 60 69 Gobo 6 70 89 Gobo 1 Shake slow – fast 90 109 Gobo 2 Shake slow – fast 110 129 Gobo 3 Shake slow – fast 130 149 Gobo 4 Shake slow – fast 150 169 Gobo 5 Shake slow – fast 150 169 Gobo 5 Shake slow – fast 170 189 Gobo 6 Shake slow – fast 190 255 Rotation Gobo wheel slow – fast 0 3 No function 4 127 Rotation gobo clockwise fast – slow 132 255 Rotation counter clockwise slow – fast 0 9 Open 10 19 Gobo 1 20 29 Gobo 2 | | 112 | 127 | Color 7 |
| 194 | | 128 | 189 | Color change clockwise fast – slow |
| 0 9 Open 10 19 Gobo 1 20 29 Gobo 2 30 39 Gobo 3 40 49 Gobo 4 50 59 Gobo 5 60 69 Gobo 6 70 89 Gobo 1 Shake slow - fast 90 109 Gobo 2 Shake slow - fast 110 129 Gobo 3 Shake slow - fast 130 149 Gobo 4 Shake slow - fast 150 169 Gobo 5 Shake slow - fast 170 189 Gobo 6 Shake slow - fast 190 255 Rotation Gobo wheel slow - fast 0 3 No function 4 127 Rotation gobo clockwise fast - slow 132 255 Rotation counter clockwise slow - fast 0 9 Open 10 19 Gobo 1 20 29 Gobo 2 | | 190 | 193 | Stop |
| 10 19 Gobo 1 20 29 Gobo 2 30 39 Gobo 3 40 49 Gobo 4 50 59 Gobo 5 60 69 Gobo 6 70 89 Gobo 1 Shake slow – fast 90 109 Gobo 2 Shake slow – fast 110 129 Gobo 3 Shake slow – fast 130 149 Gobo 4 Shake slow – fast 150 169 Gobo 5 Shake slow – fast 170 189 Gobo 6 Shake slow – fast 190 255 Rotation Gobo wheel slow – fast 0 3 No function 4 127 Rotation gobo clockwise fast – slow 132 255 Rotation counter clockwise slow – fast 0 9 Open 10 19 Gobo 1 20 29 Gobo 2 | | 194 | 255 | Color change counter clockwise slow – fast |
| 20 29 Gobo 2 30 39 Gobo 3 40 49 Gobo 4 50 59 Gobo 5 60 69 Gobo 6 70 89 Gobo 1 Shake slow – fast 90 109 Gobo 2 Shake slow – fast 110 129 Gobo 3 Shake slow – fast 130 149 Gobo 4 Shake slow – fast 150 169 Gobo 5 Shake slow – fast 170 189 Gobo 6 Shake slow – fast 190 255 Rotation Gobo wheel slow – fast 0 3 No function 4 127 Rotation gobo clockwise fast – slow 128 131 Stop 132 255 Rotation counter clockwise slow – fast 0 9 Open 10 19 Gobo 1 20 Gobo 2 | | 0 | 9 | Open |
| 4 49 Gobo 4 50 59 Gobo 5 60 69 Gobo 6 70 89 Gobo 1 Shake slow - fast 90 109 Gobo 2 Shake slow - fast 110 129 Gobo 3 Shake slow - fast 130 149 Gobo 4 Shake slow - fast 150 169 Gobo 5 Shake slow - fast 170 189 Gobo 6 Shake slow - fast 190 255 Rotation Gobo wheel slow - fast 190 3 No function 4 127 Rotation gobo clockwise fast - slow 128 131 Stop 132 255 Rotation counter clockwise slow - fast 0 9 Open 10 19 Gobo 1 20 29 Gobo 2 | | 10 | 19 | Gobo 1 |
| 40 49 Gobo 4 50 59 Gobo 5 60 69 Gobo 6 70 89 Gobo 1 Shake slow – fast 90 109 Gobo 2 Shake slow – fast 110 129 Gobo 3 Shake slow – fast 130 149 Gobo 4 Shake slow – fast 150 169 Gobo 5 Shake slow – fast 170 189 Gobo 6 Shake slow – fast 190 255 Rotation Gobo wheel slow – fast 190 3 No function 4 127 Rotation gobo clockwise fast – slow 128 131 Stop 132 255 Rotation counter clockwise slow – fast 0 9 Open 10 19 Gobo 1 20 29 Gobo 2 | | 20 | 29 | Gobo 2 |
| 50 59 Gobo 5 60 69 Gobo 6 70 89 Gobo 1 Shake slow - fast 90 109 Gobo 2 Shake slow - fast 110 129 Gobo 3 Shake slow - fast 130 149 Gobo 4 Shake slow - fast 150 169 Gobo 5 Shake slow - fast 170 189 Gobo 6 Shake slow - fast 190 255 Rotation Gobo wheel slow - fast 0 3 No function 4 127 Rotation gobo clockwise fast - slow 128 131 Stop 132 255 Rotation counter clockwise slow - fast 0 9 Open 10 19 Gobo 1 20 29 Gobo 2 | | 30 | 39 | Gobo 3 |
| 4 60 69 Gobo 6 70 89 Gobo 1 Shake slow – fast 90 109 Gobo 2 Shake slow – fast 110 129 Gobo 3 Shake slow – fast 130 149 Gobo 4 Shake slow – fast 150 169 Gobo 5 Shake slow – fast 170 189 Gobo 6 Shake slow – fast 190 255 Rotation Gobo wheel slow – fast 0 3 No function 4 127 Rotation gobo clockwise fast – slow 128 131 Stop 132 255 Rotation counter clockwise slow – fast 0 9 Open 10 19 Gobo 1 20 Gobo 2 | | 40 | 49 | Gobo 4 |
| 70 89 Gobo 1 Shake slow – fast 90 109 Gobo 2 Shake slow - fast 110 129 Gobo 3 Shake slow – fast 130 149 Gobo 4 Shake slow – fast 150 169 Gobo 5 Shake slow – fast 170 189 Gobo 6 Shake slow – fast 190 255 Rotation Gobo wheel slow – fast 0 3 No function 4 127 Rotation gobo clockwise fast – slow 128 131 Stop 132 255 Rotation counter clockwise slow – fast 0 9 Open 10 19 Gobo 1 20 29 Gobo 2 | | 50 | 59 | Gobo 5 |
| 70 89 Gobo 1 Shake slow – fast 90 109 Gobo 2 Shake slow - fast 110 129 Gobo 3 Shake slow – fast 130 149 Gobo 4 Shake slow – fast 150 169 Gobo 5 Shake slow – fast 170 189 Gobo 6 Shake slow – fast 190 255 Rotation Gobo wheel slow – fast 0 3 No function 4 127 Rotation gobo clockwise fast – slow 128 131 Stop 132 255 Rotation counter clockwise slow – fast 0 9 Open 10 19 Gobo 1 20 Gobo 2 | 1 | 60 | 69 | Gobo 6 |
| 110 129 Gobo 3 Shake slow – fast 130 149 Gobo 4 Shake slow – fast 150 169 Gobo 5 Shake slow – fast 170 189 Gobo 6 Shake slow – fast 190 255 Rotation Gobo wheel slow – fast 0 3 No function 4 127 Rotation gobo clockwise fast – slow 128 131 Stop 132 255 Rotation counter clockwise slow – fast 0 9 Open 10 19 Gobo 1 20 29 Gobo 2 | 7 | 70 | 89 | Gobo 1 Shake slow – fast |
| 130 | | 90 | 109 | Gobo 2 Shake slow - fast |
| 150 169 Gobo 5 Shake slow – fast 170 189 Gobo 6 Shake slow – fast 190 255 Rotation Gobo wheel slow – fast 0 3 No function 4 127 Rotation gobo clockwise fast – slow 128 131 Stop 132 255 Rotation counter clockwise slow – fast 0 9 Open 10 19 Gobo 1 20 29 Gobo 2 | | 110 | 129 | Gobo 3 Shake slow – fast |
| 170 | | 130 | 149 | Gobo 4 Shake slow – fast |
| 190 255 Rotation Gobo wheel slow – fast 0 3 No function 4 127 Rotation gobo clockwise fast – slow 128 131 Stop 132 255 Rotation counter clockwise slow – fast 0 9 Open 10 19 Gobo 1 20 29 Gobo 2 | | 150 | 169 | Gobo 5 Shake slow – fast |
| 0 3 No function 4 127 Rotation gobo clockwise fast – slow 128 131 Stop 132 255 Rotation counter clockwise slow – fast 0 9 Open 10 19 Gobo 1 20 29 Gobo 2 | | 170 | 189 | Gobo 6 Shake slow – fast |
| 4 127 Rotation gobo clockwise fast – slow 128 131 Stop 132 255 Rotation counter clockwise slow – fast 0 9 Open 10 19 Gobo 1 20 29 Gobo 2 | | 190 | 255 | Rotation Gobo wheel slow – fast |
| 128 131 Stop 132 255 Rotation counter clockwise slow – fast 0 9 Open 10 19 Gobo 1 20 29 Gobo 2 | | 0 | 3 | No function |
| 128 | 5 | 4 | 127 | Rotation gobo clockwise fast – slow |
| 0 9 Open 10 19 Gobo 1 20 29 Gobo 2 | 3 | 128 | 131 | Stop |
| 10 19 Gobo 1 20 29 Gobo 2 | | 132 | 255 | Rotation counter clockwise slow – fast |
| 20 29 Gobo 2 | | 0 | 9 | Open |
| 20 29 Gobo 2 | | 10 | 19 | Gobo 1 |
| 6 | 6 | 20 | 29 | Gobo 2 |
| 30 Gobo 3 | | 30 | 39 | Gobo 3 |
| 40 49 Gobo 4 | | 40 | 49 | Gobo 4 |
| 50 Gobo 5 | | 50 | 59 | Gobo 5 |



| | 60 | 69 | Gobo 6 |
|-----|-----|-----|---|
| | 70 | 79 | Gobo 7 |
| | 80 | 89 | Gobo 8 |
| | 90 | 99 | Gobo 9 |
| | 100 | 109 | Gobo 10 |
| | 110 | 119 | Gobo 11 |
| | 120 | 129 | Gobo 1 Shake slow – fast |
| | 130 | 139 | Gobo 2 Shake slow – fast |
| | 140 | 149 | Gobo 3 Shake slow – fast |
| | 150 | 159 | Gobo 4 Shake slow – fast |
| | 160 | 169 | Gobo 5 Shake slow – fast |
| | 170 | 179 | Gobo 6 Shake slow – fast |
| | 180 | 189 | Gobo 7 Shake slow – fast |
| | 190 | 199 | Gobo 8 Shake slow – fast |
| | 200 | 209 | Gobo 9 Shake slow – fast |
| | 210 | 219 | Gobo 10 Shake slow – fast |
| | 220 | 229 | Gobo 11 Shake slow – fast |
| | 230 | 255 | Rotation Gobo wheel slow – fast |
| | 0 | 31 | Shutter closed |
| | 32 | 63 | Shutter open |
| | 64 | 95 | Strobe slow – fast |
| _ | 96 | 127 | Shutter open |
| 7 | 128 | 159 | Pulse effect slow – fast |
| | 160 | 191 | Shutter open |
| | 192 | 223 | Strobe (Random) slow – fast |
| | 224 | 255 | Shutter open |
| 8 | 0 | 255 | Dimmer 0 – 100% |
| 9 | 0 | 255 | Focus |
| | 0 | 5 | No function |
| | 6 | 127 | Prism |
| 10 | 128 | 255 | Rotation Prism slow – fast |
| | 0 | 5 | No function |
| | 6 | 127 | Prism |
| | 0 | 225 | Pan / Tilt speed fast – slow |
| | 226 | 235 | Blackout while movements. |
| 11 | 236 | 245 | Blackout while movements of color and gobo wheel. |
| | 246 | 255 | No function |
| | 0 | 79 | No function |
| | 80 | 84 | Reset of all motors |
| | 85 | 87 | Reset scan motor |
| 4.0 | 88 | 90 | Reset color motor |
| 12 | 91 | 93 | Reset gobo wheel motor |
| | 94 | 96 | Reset dimmer and strobe motor |
| | 97 | 99 | Reset of all other motors |
| | 100 | 119 | Automatic program 1 |
| | | | |



| | 120 | 139 | Automatic program 2 |
|--|-----|-----|---------------------|
| | 140 | 159 | Automatic program 3 |
| | 160 | 179 | Automatic program 4 |
| | 180 | 199 | Automatic program 5 |
| | 200 | 219 | Automatic program 6 |
| | 220 | 239 | Automatic program 7 |
| | 240 | 255 | Sound-to-light mode |

6.3. DMX mode Extended (16 channel)

| Channel | Value from | Value to | Function |
|---------|------------|----------|--|
| 1 | 0 | 255 | Pan |
| 2 | 0 | 255 | Pan fine |
| 3 | 0 | 255 | Tilt |
| 4 | 0 | 255 | Tilt fine |
| | 0 | 15 | White |
| | 16 | 31 | Color 1 |
| | 32 | 47 | Color 2 |
| | 48 | 63 | Color 3 |
| | 64 | 79 | Color 4 |
| 5 | 80 | 95 | Color 5 |
| | 96 | 111 | Color 6 |
| | 112 | 127 | Color 7 |
| | 128 | 189 | Color change clockwise fast – slow |
| | 190 | 193 | Stop |
| | 194 | 255 | Color change counter clockwise slow – fast |
| | 0 | 9 | Open |
| | 10 | 19 | Gobo 1 |
| | 20 | 29 | Gobo 2 |
| | 30 | 39 | Gobo 3 |
| | 40 | 49 | Gobo 4 |
| | 50 | 59 | Gobo 5 |
| 6 | 60 | 69 | Gobo 6 |
| J | 70 | 89 | Gobo 1 Shake slow – fast |
| | 90 | 109 | Gobo 2 Shake slow - fast |
| | 110 | 129 | Gobo 3 Shake slow – fast |
| | 130 | 149 | Gobo 4 Shake slow – fast |
| | 150 | 169 | Gobo 5 Shake slow – fast |
| | 170 | 189 | Gobo 6 Shake slow – fast |
| | 190 | 255 | Rotation Gobo wheel slow – fast |
| | 0 | 3 | No function |
| 7 | 4 | 127 | Rotation gobo clockwise fast – slow |
| | 128 | 131 | Stop |
| | 132 | 255 | Rotation counter clockwise slow – fast |
| 8 | 0 | 9 | Open |
| | 10 | 19 | Gobo 1 |



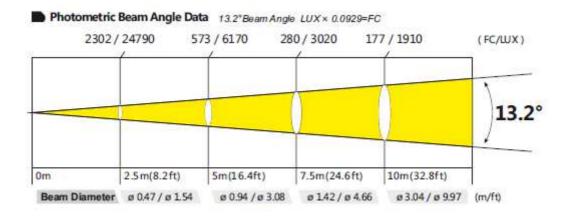
| | 20 | 29 | Gobo 2 |
|----|-----|-----|---|
| | 30 | 39 | Gobo 3 |
| | 40 | 49 | Gobo 4 |
| | 50 | 59 | Gobo 5 |
| | 60 | 69 | Gobo 6 |
| | 70 | 79 | Gobo 7 |
| | 80 | 89 | Gobo 8 |
| | 90 | 99 | Gobo 9 |
| | 100 | 109 | Gobo 10 |
| | 110 | 119 | Gobo 11 |
| | 120 | 129 | Gobo 1 Shake slow – fast |
| | 130 | 139 | Gobo 2 Shake slow – fast |
| | 140 | 149 | Gobo 3 Shake slow – fast |
| | 150 | 159 | Gobo 4 Shake slow – fast |
| | 160 | 169 | Gobo 5 Shake slow – fast |
| | 170 | 179 | Gobo 6 Shake slow – fast |
| | 180 | 189 | Gobo 7 Shake slow – fast |
| | 190 | 199 | Gobo 8 Shake slow – fast |
| | 200 | 209 | Gobo 9 Shake slow – fast |
| | 210 | 219 | Gobo 10 Shake slow – fast |
| | 220 | 229 | Gobo 11 Shake slow – fast |
| | 230 | 255 | Rotation Gobo wheel slow – fast |
| | 0 | 31 | Shutter closed |
| | 32 | 63 | Shutter open |
| | 64 | 95 | Strobe slow – fast |
| 9 | 96 | 127 | Shutter open |
| 9 | 128 | 159 | Pulse effect slow – fast |
| | 160 | 191 | Shutter open |
| | 192 | 223 | Strobe (Random) slow – fast |
| | 224 | 255 | Shutter open |
| 10 | 0 | 255 | Dimmer 0 – 100% |
| 11 | 0 | 255 | Focus |
| | 0 | 5 | No function |
| | 6 | 127 | Prism |
| 12 | 128 | 255 | Rotation Prism slow – fast |
| | 0 | 5 | No function |
| | 6 | 127 | Prism |
| | 0 | 225 | Pan / Tilt speed fast – slow |
| 13 | 226 | 235 | Blackout while movements. |
| | 236 | 245 | Blackout while movements of color and gobo wheel. |
| | 246 | 255 | No function |
| | 0 | 79 | No function |
| 14 | 80 | 84 | Reset of all motors |
| 14 | 85 | 87 | #Reset scan motor |
| | 88 | 90 | Reset color motor |
| | | | |



| | 91 | 93 | Reset gobo wheel motor |
|----|-----|-----|-------------------------------|
| | 94 | 96 | Reset dimmer and strobe motor |
| | 97 | 99 | Reset of all other motors |
| | 100 | 119 | Automatic program 1 |
| | 120 | 139 | Automatic program 2 |
| | 140 | 159 | Automatic program 3 |
| | 160 | 179 | Automatic program 4 |
| | 180 | 199 | Automatic program 5 |
| | 200 | 219 | Automatic program 6 |
| | 220 | 239 | Automatic program 7 |
| | 240 | 255 | Sound-to-light mode |
| 15 | 0 | 255 | Speed color wheel fast - slow |
| 16 | 0 | 255 | Speed gobo wheel fast - slow |



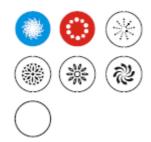
7. Photometrical data



8. Color wheel



9. Gobo wheel 1 (rotatable)



10. Gobo wheel 2 (static)





11. Technical data

| consumption max. source e LE spectrum 75 15 er / Power 1x | |
|--|--|
| source e LE spectrum 75 15 er / Power 1x angle 13 | ED single color 500 K 50 W x 150 W 3,2° es |
| e LE spectrum 75 15 er / Power 1x sangle 13 | 500 K 50 W x 150 W 3,2° es |
| rpectrum 75 15 2r / Power 1x 3 angle 13 | 500 K 50 W x 150 W 3,2° es |
| 15 er / Power 1x angle 13 | 50 W x 150 W 3,2° es |
| er / Power 1x sangle 13 | x 150 W 3,2° es |
| angle 13 | 3,2° es |
| angle 13 | es |
| C . | es |
| Ye | |
| | |
| 3-1 | -way |
| ections | |
| in P-0 | -Con |
| out P-0 | -Con |
| /out 3 p | pin |
| ons | |
| 36 | 60° / 540° / 630° |
| 90 | 0° / 180° / 270° |
| ad 1 7-v | -way, rotatable |
| ad 2 12 | 2-way, static |
| vheel 7 c | colors + white |
| olling | |
| -to-Light Ye | es |
| atic Ye | es |
| -Slave Ye | es |
| 12 Ye | es |
| er of channels 12 | 2 / 14 / 16 channels |
| are | |
| tion class IP2 | 220 |
| lity Inc | ndoor |
| sions (L/B/H) 29 | 98 x 183 x 410 mm |
| 9,5 | ,5 kg |



Importer:

B & K Braun GmbH Industriestraße 2 D-76307 Karlsbad

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