JOY 150

Instruction Manual

From Version 1.0

GERMAN LIGHT PRODUCTS

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Contents

1 Introduction

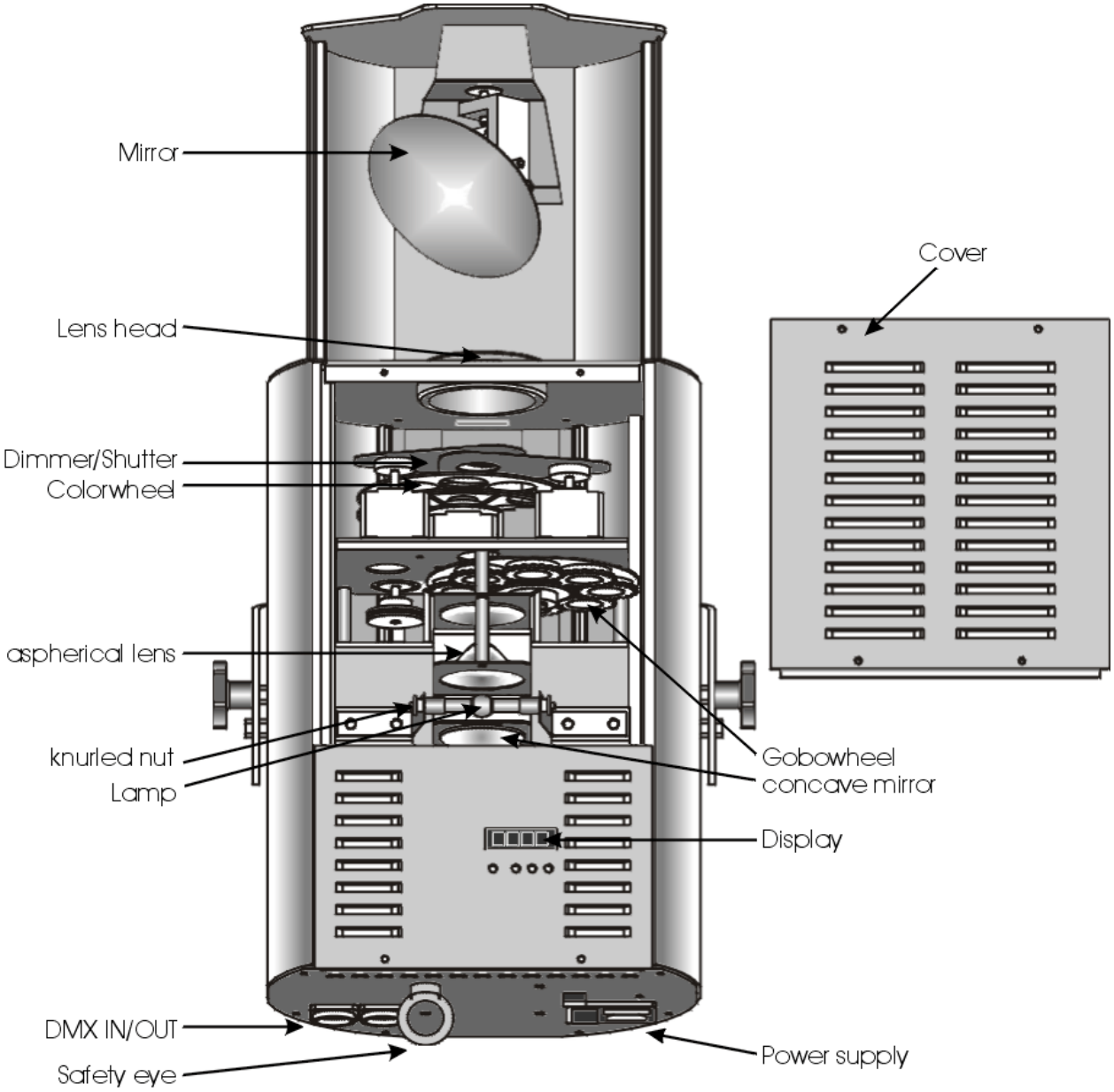


Abbildung 1-1

1.1 Safety rules

The **JOY-150** is a High-Tech Product. To guarantee a smooth operation, it is necessary to keep following rules.

1. Make sure that the mirror of the **JOY-150,** can move without any mechanical problems and that all fan openings are clean and not blocked by anything.
2. Touching the mirror while moving can cause serious injuries
3. Unplug the **JOY-150** from the AC outlet before any service
4. It is necessary to wait at least 30 minutes after disconnecting the AC before you open the **JOY-150** . Please do not touch the Bulb if you are not absolutely sure it is cold. **-Danger of BURNING-**
5. The **JOY-150** is provided with a protecting switch which disconnects the power from the lamp while the cover is opened. **Never bridge this protecting switch it can damage your retina and you can go blind!**
6. To allow a secure operation, follow also the Installation guide described in chapter 2. Operating the **JOY-150** without suited safety aids like Safety cables or clamps/hooks can increase the risk of an accident.
7. The installation should be done by qualified staff only. You need to pay attention to the common rules of technology that are not explicit mentioned in this manual.

2 Installation

2.1 Mounting

The **JOY-150** is fully operational whether it hangs or is mounted to the wall.

2.1.1 Clamps

Mount clamps and/or hooks directly to the bow of the **JOY-150.** Please make sure to use right sized clamps and hooks and fit them securely.

2.2 Secure the JOY-150

Use always safety wires to secure the **JOY-150,** connect them with the eyelet (see Drawing 1-1) and check the tight fit!

2.3 Connectors

2.3.1 AC Connectors

230 Volt, 50 Hz, 0,9AT (power compensated)

115 Volt, 60 Hz, 1,8AT (power compensated)

Please see printing on the case for the right Power supply !

2.3.2 DMX

DMX 512 Standard input/output.

[+] = Pin 3 / [-] = Pin 2 / [Ground] = Pin 3

Die DMX- Address starts at [001].

Please see printing on the case for the right Pin usage!

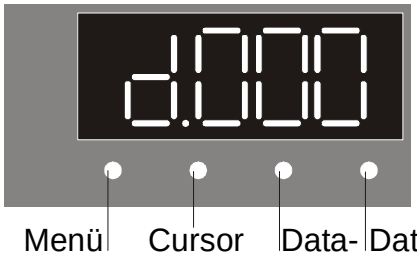
2.4 Fuse

The **JOY-150** electronic system is protected by 5x20 T4A fuse 250V.

Please see the printing on the **JOY-150** for more details look at the Drawing 1-1.

Disconnect AC outlet before changing a fuse !!!

3 The Menu Field



3.1 Adjust the DMX- Address

Right after turning on the **JOY-150** you can see the current DMX- Address. Choose this as follows:

Count up or down the DMX- Address with the Data + or Data – buttons. After pushing the Cursor button the upcounting speed increases to a multiple. You can see that at the three decimal dots. Pushing the Cursor button again to get to the slow speed.

Confirm the DMX-Address by pressing the Menu key once.

Attention: As long as you see the decimal dot flashing the new address is not saved.

If there is no DMX- Signal, the **d** in the display is flashing.

The DMX-Address is stored also while switching off the **JOY-150** !!!

3.2 Read out the Running Time of Lamp and Unit

Select the time level by pressing the Menu key twice.

Select the requested time by pressing the Cursor key,

3.2.1 Lamp Time 1

The current lamp time is shown alternating with LA 1.

This time can be cleared by pressing the Data + and Data – keys at the same time.

3.2.2 Lamp Time 2

The total lamp time is shown alternating with LA 2. This time can't cleared.

3.2.3 Life Time

The life time is shown alternating with LIFE.

3.3 The CODE Level

This level is accessed by authorized dealers only.

In this level you can adjust all functions.

3.4 The Test Level

The Test Level makes a selftest procedure possible.

Select the selftest Procedure by pressing the Menu key three times.

Start the selftest program by pressing the Cursor key. The lamp will be started automatically and a selftest procedure with 8 steps will run. To leave the selftest press the Menu key again.

3.5 Temperature Control 1

Deviates the temperature value to much from the system standard, the lamp will turn off automatically.

Reconnection can only be made by authorized dealers.

4 Channel selection (Overview table)

Channel	Description	DMX	Hex	Value in %
1) PAN – High	0..180°	0..255	00..FF	0..100
2) PAN – Low	High-Pos .. High-Pos + 0,7°	0..255	00..FF	0..100
3) TILT – High	0..150°	0..255	00..FF	0..100
4) TILT – Low	High-Pos .. High-Pos + 0,59°	0..255	00..FF	0..100
5) Color	Open	0..3	00..03	0..1
	Open / Color 1	4..7	04..07	2..3
	Color 1	8..11	08..0B	3..4
	Color 1 / Color 2	12..15	0C..0F	4..5
	Color 2	16..19	10..13	5..7
	Color 2 / Color 3	20..23	14..17	8..9
	Color 3	24..27	18..1B	9..10
	Color 3 / Color 4	28..31	1C..1F	10..11
	Color 4	32..35	20..23	12..13
	Color 4 / Color 5	36..39	24..27	14..15
	Color 5	40..43	28..2B	16..17
	Color 5 / Color 6	44..47	2C..2F	17..18
	Color 6	48..51	30..33	19..20
	Color 6 / Color 7	52..55	34..37	20..21
	Color 7	56..59	38..3B	21..22
	Color 7 / open	60..127	3C..7F	23..49
	Rot. Color, slow – fast CW	128..191	80..BF	50..75
	Rot. Color fast – slow CCW	192..253	C0..FD	76..98
	Audio Color-change slow	254	FE	99
	Audio Color-change fast	255	FF	100
6) Gobo	Gobo 1 big spot	0..15	00..0F	0..6
	Gobo 2	16..31	10..1F	7..12
	Gobo 3	32..47	20..2F	13..18
	Gobo 4	48..63	30..3F	19..24
	Gobo 5	64..79	40..4F	25..31
	Gobo 6	80..96	50..5F	32..37
	Gobo 7	96..127	60..7F	38..50
	Rot. Gobo, slow - fast CW	128..191	80..BF	51..75
	Rot. Gobo, fast – slow CCW	192..253	C0..FD	76..98
	Audio Gobo-change slow	254	FE	99

Channel	Description	DMX	Hex	Value in %
	Audio Gobo-change fast	255	FF	100
7) Shutter	Shutter closed	0..15	00..0F	0..6
	Shutterfrequence slow – fast	16..239	10..EF	7..93
	Shutter open	240..255	F0..FF	94..100
8) Gobo	Gobo position 0..700°	0..127	00..7F	0..50
Rotation	Gobo rotation slow - fast CW	128..191	80..BF	51..75
	Gobo rotation fast – slow CCW	192..253	C0..FD	76..100
	Audio Gobo Rotation slow	254	FE	99
	Audio Gobo Rotation fast	255	FF	100
9) Special	No function	0..15	00..0F	0..6
	Gobo-wipe +/- 10° slow - fast	16..31	10..1F	7..12
	Gobo-wipe +/- 20° slow - fast	32..47	20..2F	13..18
	Gobo-wipe +/- 30° slow - fast	48..63	30..3F	19..24
	Color Chaser C / C+1 slow - fast	64..79	40..4F	25..31
	Color Chaser C / C+2 slow - fast	80..95	50..5F	32..37
	Audio Pan / Tilt slow	96..111	60..6F	38..43
	Audio Pan / Tilt fast	112..127	70..7F	44..50
	Engage Program – Mode→ **	192..207	C0..CF	75..81
	Engage Program-Receive-Mode→ **	208..223	D0..DF	82..87
	Engage Program–Send–Mode→ **	224..239	E0..EF	88..93
	No Function	240..249	F0..F9	94..97
	Reset	250..255	FA..FF	98..100
10) Speed	Pan/Tilt relative	0..15	00..0F	0..6
	Pan/Tilt slow – fast	16..255	10..FF	7..100
11* Save Step	X → 255 → 0, X → FF → 0 save programstep in the Scanner	X→255→0	X→FF→0	X→100→0
	Call saved programsteps	00..15	00..15	0..6
	Set DMX-Values	16..254	10..FE	7..99
12* Next Time	Audio – min. Time 0,4 sec	0..04	0..04	0..2
	Next Time in 1/10 sec	5..199	05..C7	3..78
	Audio – min. Time 1 sec	200..209	C8..D1	79..82
	Audio – min. Time 2 sec	210..219	D2..CB	83..85
	Audio – min. Time 3 sec	220..229	DC..E5	86..89
	Audio – min. Time 5 sec	230..239	E6..EF	90..93
	Audio – min. Time 10 sec	240..255	F0..FF	94..100

Channel	Description	DMX	Hex	Value in %
13* Step No.	Programstep No. 1	0..7	00..07	0..2
	Programstep No. 2	8..15	08..0F	3..5
	Programstep No. 3	16..23	10..17	6..9
	Programstep No. 25	224..239	F0..F7	87..93
	Engage Lern – Mode with channel 11 and channel 12, 0 → 255 → 0	240..255	F8..FF	94..100
Lamp ON	Shutter open	240..255	F0..FF	94..100
Lamp OFF	Shutter close and Special channel 9 and Speed channel 10	0..15 0...10 X→255→0	00..0F 0...0A X→FF→0	0..6 0...4 X→100→0

* These channels are only activated in the Program – Mode

** You can activate the Program – Mode either with an DMX controller or direct at the display of the **JOY-150.**

At the scanner choose the function **"P"** with the Menu key. Than select the Program – Mode with the Cursor key.

If you use a DMX controller choose one of the Program – Modes with the *Special* Channel (No.09). Than engage channel *Step No.* (No.13) to DMX 255. To save this mode engage channel S*ave Step* (No.11) from 0→255→0.

If the Send- or Receive – Mode is engaged the channels 11, 12 and 13 are activated.

5 Programming the JOY-150

You can program the **JOY-150** in a standalone program within 25 steps. This program can run automatically after turning on the unit. This means you need a DMX Controller for programming but not for running the stand alone program.

5.1 Engage the Program Mode

Normal - Mode: Receive standard DMX signal.

Receive - Mode: The scanner receives DMX signals for programming and stores the steps.

Send - Mode: The scanner works stand alone and sends DMX signals to other scans.

a) Engage at the JOY-150

Press the Menu key once. **P_n_**. You are now in the Normal–Mode.

Change with the Cursor key to the Receive – Mode **P._r_** or further to the Send– Mode **P._S_**

Press the Menu key again to confirm the changes.

b) Engage with a DMX Controller

Look at the channel selection overview table.

5.2 Write a program

You must be in the Receive- or Send – Mode to program the **JOY-150.** In this mode the DMX Channels 11, 12 and 13 are activated.

Procedure:

1) Activate the Receive- or Send - Mode.
2) Set Channel No.11 to *"Set DMX-Values"* (DMX 16..254).
3) Choose the program step with DMX Channel No.13.
4) Set your DMX adjustments with the DMX Channels No.1..10.
5) Choose the Next Time or the Audio control with DMX Channel No.12.
6) Save the step with DMX Channel No.11 **xx → 255 → 00.**
7) etc.

5.3 Call on the Standalone Program

Engage the Send – Mode at the **JOY-150.**

The program starts automatically after turning on the unit. In the display you can see the Next Time for the following step. At the last step the program will jump automatically to the beginning of the program.

6 Change the Lamp

For a hassle free change of the Light bulb, it is absolutely necessary to follow all descriptions in this chapter step by step.

6.1 Safety Rules

- Unplug AC power connection
- Allow to cool (min. 30 minutes)
- Don't touch lamp with bare fingers.
- Install the lamp with the filler to the right direction.
- Distance between lamp and lens holder must be min. 5mm.
- Close the **JOY-150** before you connect the AC power!

6.2 How to change the lamp

Please look also Illustration 1-1.

1. Open the two screws at the top plate.
2. Take off the broken 150 CMD lamp and put in an new one.
3. Close the **JOY-150** in reverse order.

Attention:

Please make sure that you don't touch the bulb of the lamp with bare fingers !!!

7 Change the Gobos

The **JOY-150** is fitted with standard Gobos (∅26 mm, picturesize 22mm).

7.1 Safety Rules

- Unplug AC power connection
- Allow to cool (over 30 minutes)
- Don't touch lamp with bare fingers.
- Close the **JOY-150** before you connect the AC power!

7.2 How to change the Gobos

Please look also Illustration 1-1.

1. Open the two screws at the top plate.
2. Remove the gobo springs with the help of an small screwdriver.
3. Change the Gobo's and fix them with the gobo springs.
4. Close the **JOY-150** in reverse order.

Do the same with the Effect Wheel.

Attention:

If you use glasgobo's the mirror - side of the Gobo must align towards the mirror.

Close the **JOY-150** in reverse order.

8 Maintenance the JOY-150

The cleaning of the inner optical System, color filters, color correction filter and lenses should be done by qualified person only! Contact your local **GLP** Dealer for details.

Use no strong detergents, acid etc. for cleaning the case.

8.1 Mirror and Optical System

Clean the **JOY-150** optical system with a moistened cloth and a little cleaner.

Attention:

Never clean the aspheric lens besides the lamp with water or cleaner. Do only use a clean and dry piece of cloth.

It is necessary to clean the fan openings, air channels and fan gratings on a regular base (depending on the local environment, about every two weeks).

9 Technical Data / Overview

- AC 230V/0,9 AT or AC 115V/1,8 AT
- 150 CMD Lamp with 6000h lifetime
- Power compensated
- DMX 512 Standard
- Weight 12 kg
- Dimensions: 600 x 175 x 265 mm
- 16 Bit Pan/Tilt
- Pan- movement: 180°
- Pan- movement: 150°
- angle of spread: 16°
- 5 rotating and positioning Gobos
- 1 fixed Gobos
- 7 Colors + white
- 8 Half colors
- Rainbow effect
- High Speed Shutter
- Audio controlled
- Programmable up to 25 steps

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