Manual

As of February 2019

LPS-Lasersysteme Siegmund Ruff / CEO Haidschwaerze 18 72131 Ofterdingen Germany
Phone: +49 7473 271177 www.lps-laser.com s.ruff@lps-laser.de

Foreword

Thank you for purchasing an LPS product.

Before you operate this product the first time, please read this manual carefully.

Our systems are equipped with high sensitive electronics and mechanics.
Strong shocks can cause significant damage to the system.

CAUTION!
Should an error occur due to improper handling or maintenance, there is no warranty.

Contents

LPS-Lasersysteme Siegmund Ruff / CEO Haidschwaerze 18 72131 Ofterdingen Germany
Phone: +49 7473 271177 www.lps-laser.com s.ruff@lps-laser.de

1. Commissioning

1.1 Areas of use

This device is designed for mobile use and for permanent installations.

1.2 Electric connection

This product is approved to be operated only with 9V – 12V DC

1.3 Installation

Your SpectraL³ device was delivered with mounting brackets that fit only the laser system you ordered (either an LPS-BaX or a Spike laser system).

Mounting the device on an LPS-Bax System, may only be done while the laser system stands safe. As you need to release carrying connections of the laser system, while mounting the SpectraL³ device.

Attention:
If you try to mount the SpectraL³ on an LPS-BaX laser system,
while the laser system is hanging, the laser system may fall apart!

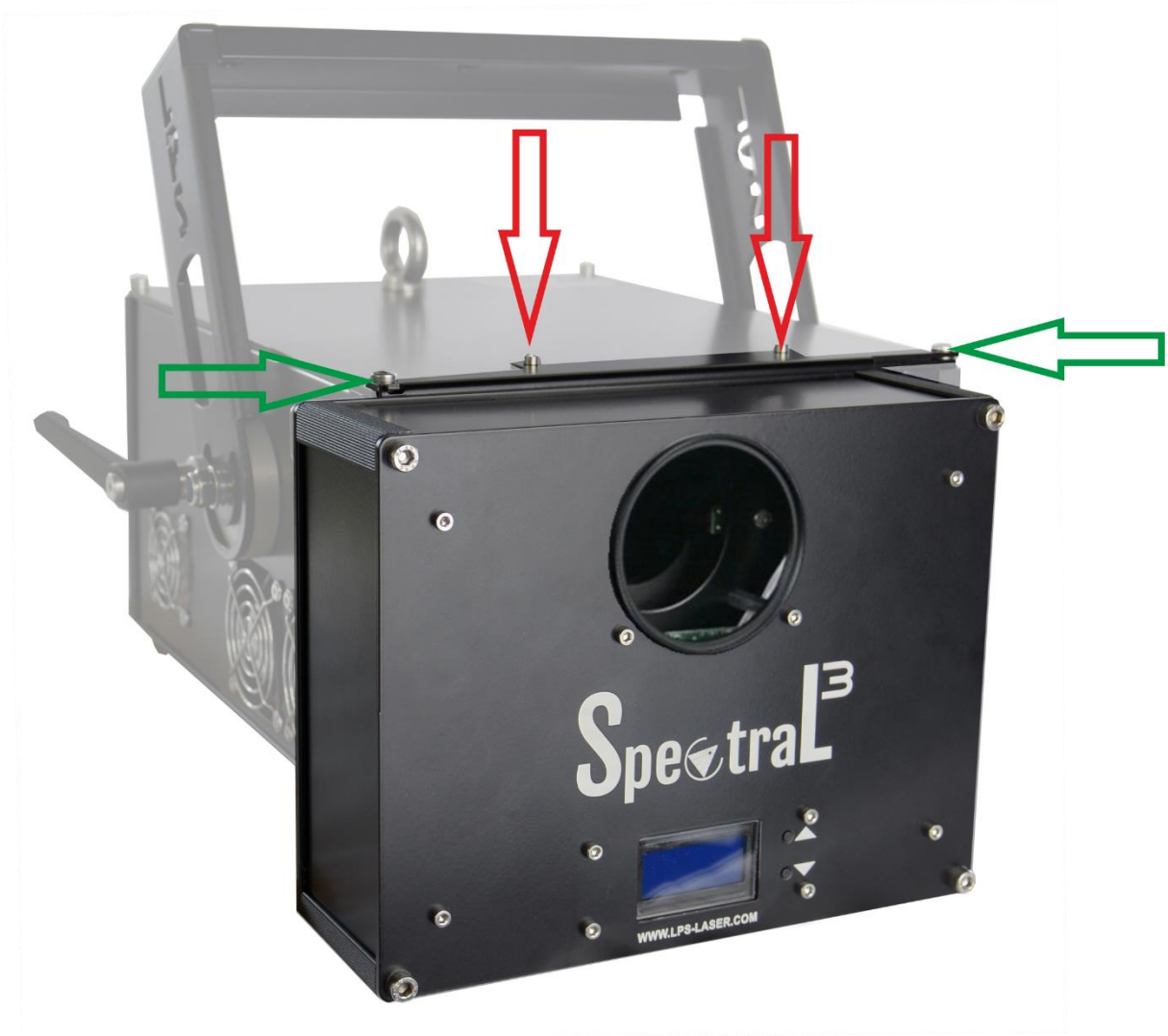
LPS-Lasersysteme Siegmund Ruff / CEO Haidschwaerze 18 72131 Ofterdingen Germany
Phone: +49 7473 271177 www.lps-laser.com s.ruff@lps-laser.de

1.3.1 Mount on an LPS-Bax system

To mount the device on an LPS-BaX laser system, you need to open the four screws (two screws on the left and two screws on the right).
Use the same four screws to fix the SpectraL³ device on the laser system, as shown in the picture above.

LPS-Lasersysteme Siegmund Ruff / CEO Haidschwaerze 18 72131 Ofterdingen Germany
Phone: +49 7473 271177 www.lps-laser.com s.ruff@lps-laser.de

1.3.2 Mount on a Spike system



To mount the SpectraL³ device on a Spike laser system, you need to open the four screws which are marked with the red arrows (two screws on the top and two screws on the bottom).
You do not need to open the screws which are marked with the green arrows.
Use the same four screws to fix the SpectraL³ device on the laser system, as shown in the picture above.

LPS-Lasersysteme Siegmund Ruff / CEO Haidschwaerze 18 72131 Ofterdingen Germany
Phone: +49 7473 271177 www.lps-laser.com s.ruff@lps-laser.de

1.4 Unpack and connect

Check the content of the package of its completeness.
The following parts are included:

- SpectraL³ device
- 12V AC / DC power supply
- Mounting brackets for either LPS-BaX or Spike laser systems.

- Connect the SpectraL³ device with your DMX console.
- Plug in the 12V AC/DC power supply and connect it with your device.

2. Technical specification

Operating voltage	12 V_{DC}
Operating current	< 1100 mA
Power consumption	< 13 W
Degree of protection	IP 42
Protection class	3, extra low voltage
Operating temperature	5° - 40° C
Warm-up time	none
Deflection angle	> 45° (wide effect angle)
Dimension and weight	220 x 170 x 78 mm 1,8 kg

LPS-Lasersysteme Siegmund Ruff / CEO Haidschwaerze 18 72131 Ofterdingen Germany
Phone: +49 7473 271177 www.lps-laser.com s.ruff@lps-laser.de

3. Overview

The overview will help you to find a better handle to the functions of the systems.

3.1 Housing front view

1	**Laser output window**
2	**Display**
3	**Control buttons for setting the DMX address**

LPS-Lasersysteme Siegmund Ruff / CEO Haidschwaerze 18 72131 Ofterdingen Germany
Phone: +49 7473 271177 www.lps-laser.com s.ruff@lps-laser.de

3.2 Housing side view

1	**5-pin DMX In**
2	**5-pin DMX out**
3	**Power In (9V – 12V DC)**

LPS-Lasersysteme Siegmund Ruff / CEO Haidschwaerze 18 72131 Ofterdingen Germany
Phone: +49 7473 271177 www.lps-laser.com s.ruff@lps-laser.de

4. DMX-512 connection

The fixture is equipped with 5-pin XLR sockets for DMX input and output. The sockets are wired in parallel. Only use a shielded twisted-pair cable designed for RS-485 and 5-pin XLR-plugs and connectors, in order to connect the controller with the fixture, or one fixture with another.

Pin	Description
1	Shield
2	Signal (-)
3	Signal (+)
4	Not connected
5	Not connected

4.1 DMX protocol

Channel	DMX Value	Function	Type of control
1	0 .. 57	Gobo selection	Open (no effect)
	58 .. 127		Lumia
	128 .. 198		Spectral line
	199 .. 255		Spectral grating
2	0 .. 255	Gobo rotation manually	Setting to absolute angle
3	0 .. 116	Gobo rotation automatically	Clockwise, getting slower
	117 .. 138		No rotation
	139 .. 255		Counterclockwise, getting faster
4	255	Reset	Reset the position: 0 -> 255 -> 0

LPS-Lasersysteme Siegmund Ruff / CEO Haidschwaerze 18 72131 Ofterdingen Germany
Phone: +49 7473 271177 www.lps-laser.com s.ruff@lps-laser.de