



BLUE-100-473

USER MANUAL



Please read this manual carefully before you initially start-up!



DANGER LASER RADIATION!

Avoid direct eye exposure!

Laser radiation can cause eye damage and/or skin damage

All protective measures for a safe operation of this laser must be applied.

1. SAFETY INSTRUCTIONS

- If the device has been exposed to drastic temperature fluctuation, do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.
- The laser must only be used for shows. The operation is only allowed if it is controlled by a skilled and well-trained operator.
- Never leave this device running unattended and keep it away from children and unauthorized persons.
- Keep away from heaters and other heating sources. In order to safeguard sufficient ventilation, leave 50 cm of free space around the device.
- Never direct the laser beam to people or animals.
- CAUTION LASER DIODE: Never unscrew the housing!
There are no serviceable parts inside the device. Maintenance and service operations shall only be carried out by authorized dealers.
- Always disconnect from the mains when the device is not in use or before cleaning it.
- **HEALTH HAZARD! Never look directly into the light source, as sensitive persons may suffer an epileptic shock!**

Blue diode pumped solid state lasers:**BLUE-100-473**

All solid state 473nm blue lasers feature ultra compact dimensions, long lifetime and are easy to operate. These powerful solid state lasers offer a very well visible blue beam and are perfect for use in show laser projectors. The separate power supply has very low power consumption.

Technical specifications:

- Laser diode with analogue modulated PSU
- **Blue: guaranteed:** 85mW; **typical:** 100mW /473nm
- **Operating mode:** CW
- **power stability (rms,over 4 hours):** <5%, <10%
- **Warm - Up time:** <15min
- **M2-factor:** <2,0
- **Beam divergence, full angle:** <2,0 mrad
- **Beam diameter at the aperture:** ~3mm
- **Beam height from base:** 29mm
- **Polarization ratio:** >100:1
- **Noise of amplitude (rms):** ~30%
- **Point stability after warm-up (mrad):** <0,05
- **Operating temperature:** 10-35°C
- **Expected lifetime:** 10000 Stunden
- **Net weight of laser head:** 0,86kg
- **Dimensions of laser head:** 155mm x 77mm x 60mm (L x W x H)
- **analoge Modulation:** 10KHz
- **Power Supply:** 110V~220V, 50/60 Hz
- **Weight:** ca. 3kg

EU- Declaration of Conformity



We hereby confirm that the following device

Laserworld BLUE-100-473

complies with the essential safety requirements, laid down in the regulations of the committee to assimilate the provisions of law of all participating EU states on the electromagnetic compatibility (98/336/EWG).

The device has been classified considering the following EU-norms on electromagnetic compatibility:

DIN EN 55103-1: 1996

DIN EN 55103-2: 1996

DIN EN 61000-3-2:2000 + A2: 2005

DIN EN 61000-3-3:1995 + A1: 2001

Assessment of compliance of the product with the requirements relating to the Low Voltage Directive (LVD) was based on the following standards:

DIN EN 60065 : 2002

This declaration is executed on behalf of the BLUE-100-473 importer:

Laserworld (Switzerland) AG

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