

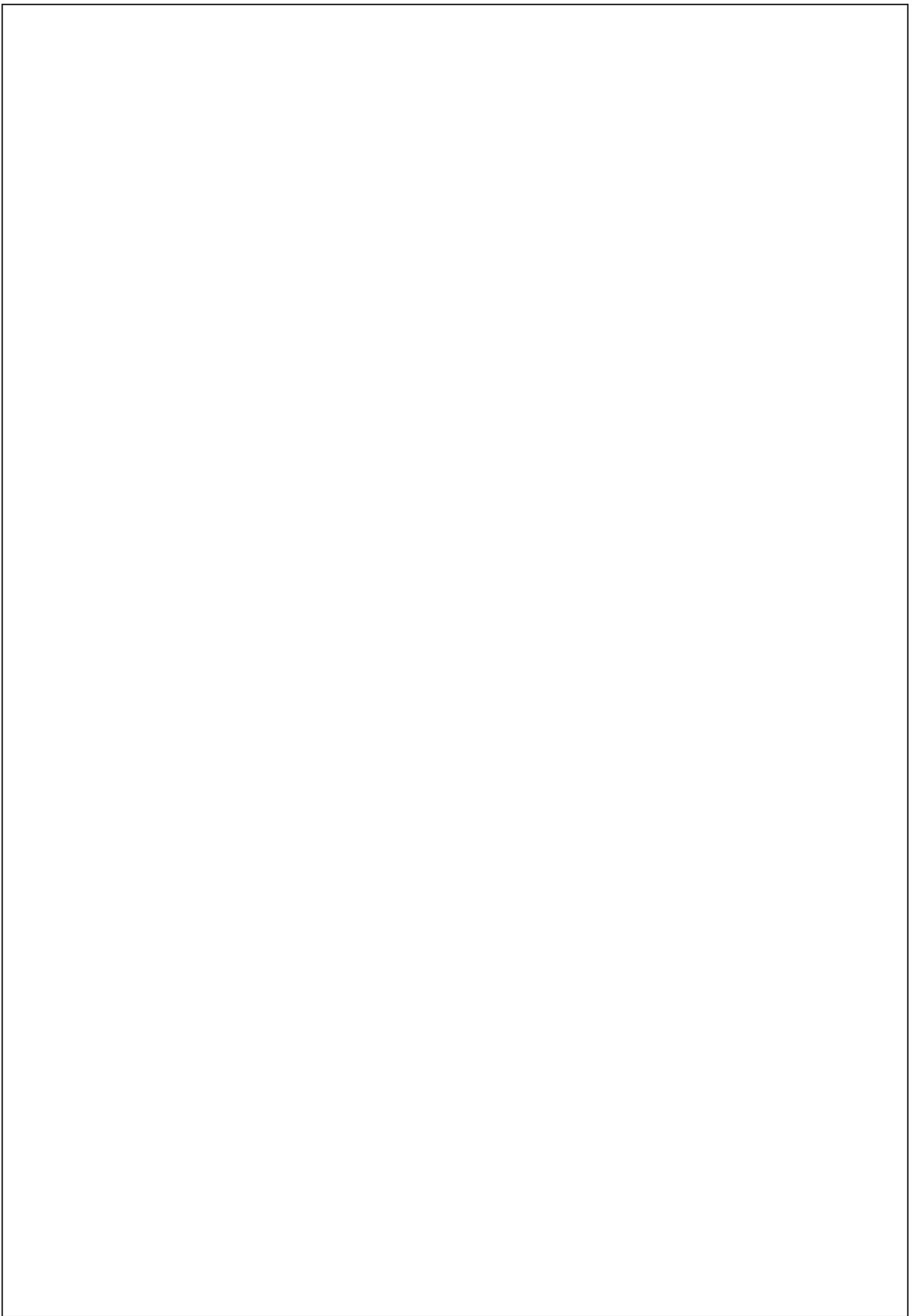


The Light Measurement Company

**WLS100
Fibre-Coupled
White Light Source**

User Manual

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1. Introduction

This manual has been written to provide information on the use of the FSM150Xe programmable monochromatic light source.

2. Overview

The Bentham WLS100 is a general purpose fibre coupled light source designed to give high broad band output through fibre. It uses a 100W quartz halogen lamp (Bentham Part 09101), a lamp having a very good specification in terms of output stability and of distance from electrical connections to filament therefore obviating the need for alignment on changing the bulb.



3. Operation

The WLS100 unit is a turn key solution, and is fitted with a switch mode power supply allowing use with mains supplies from 85V ac to 265V ac. A 2.5A slow blow fuse is fitted.

It is recommended to let the lamp warm-up for around ten minutes to stabilise.

Should the lamp fail, as shall be indicated by the red "lamp failed" LED, please follow bulb replacement procedure following.

4. Lamp Replacement

It is important to replace the present bulb with the same make/ version, ie Bentham Part 09101 for optimal filament position with respect to the output optics. Lamp life is estimated at 2000 hours.

The procedure for lamp change is as follows:-

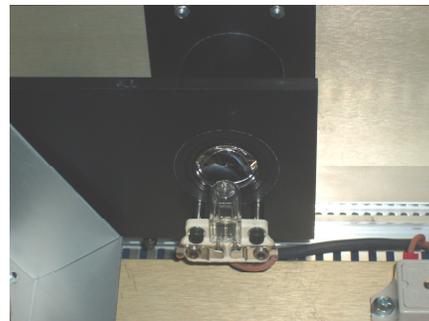
- Ensure mains power lead disconnected.
- Loosen the two Allen screws, indicated below, on top rear of unit and slide back the lid (3mm AF hexagon key)



- Remove the lamp housing/ fan unit by undoing the two screws indicated in the following image, and gently pulling the metallic housing to the back of the unit clear of the lamp



- Remove the old bulb and discard
- Using the plastic cover in which the new lamp is packaged (to prevent contamination of glass envelope) insert new lamp into fixture, ensuring that the electrical connections are pushed right down to the lower "ledge" of the lamp holder, indicated below, thus positioning the filament correctly.



- Replace the lamp housing taking care to ensure that the lamp mount electrical connections, situated below the lamp, pass through the notch cut into the housing for them.
- Close the lid. The unit is ready for use.

Product Guarantee



BENTHAM INSTRUMENTS warrants each instrument to be free of defects in material and workmanship for a period of **one** year after shipment to the original purchaser. Liability under this warranty is limited to repairing or adjusting any instrument returned to the factory for that purpose.

The warranty of this instrument is void if the instrument has been modified other than in accordance with written instructions from BENTHAM, or if defect or failure is judged by BENTHAM to be caused by abnormal conditions of operation, storage or transportation.

This warranty is subject to verification by BENTHAM, that a defect or failure exists, and to compliance by the original purchaser with the following instructions:

1. Before returning the instrument, notify BENTHAM with full details of the problem; including model number and serial number of the instrument involved.
2. After receiving the above information, BENTHAM will give you shipping instructions or service instructions. After receipt of Shipping instructions, ship the instrument "carriage paid" to BENTHAM. Full liability for damage during shipment is borne by the purchaser. It is recommended that instruments shipped to us be fully insured and packed surrounded by at least 2 inches of shock-absorbing material. Specific transit packaging as used in monochromators etc. must be installed.

BENTHAM reserves the right to make changes in design at any time without incurring any obligation to install same on units previously purchased.

This warranty is expressly in lieu of all other obligations or liabilities on the part of BENTHAM, and BENTHAM neither assumes, nor authorises any other person to assume for it, any liability in connection with the sales of BENTHAM'S products.

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WEEE statement

Bentham are fully WEEE compliant, our registration number is WEE/CB0003ZR.
Should you need to dispose of our equipment please telephone 0113 385 4352 or 4356,
quoting account number 135412.

