NIPPON Genetics EUROPE GmbH

FastGene® Blue LED Illuminator

Instruction Manual

Catalogue Number FG-05

Version 01/2023

NIPPON GENETICS EUROPE GmbH; Mariaweilerstraße 28-30; 52349 Düren,
,Tel: +49 2421 554960, FAX: +49 2421 5549611

Hardware Instruction Manual

This LED illuminator is suitable for research use only.

It must be used by specialized personnel that know the health risks associated with blue light irradiation and with the reagents that are normally used with this instrument. Human naked eyes with long time irradiation of blue light may have the probability of suffering from retina diseases. The amber filter provides blue light protection. However, it does not guarantee complete protection. It is designed to shield the person working at the LED illuminator only.

WARRANTY

The LED illuminator is warranted against defects in materials and workmanship for 1 year. If any defects occur in the instrument or accessories during this warranty period, Nippon Genetics Europe GmbH will repair or replace the defective parts at its discretion without charge. The following defects, however, are specifically excluded:

1. Defects caused by improper operation.
2. Repair or modification done by anyone other than Nippon Genetics Europe GmbH or an authorized agent.
3. Damage caused by substituting alternative parts.
4. Use of fittings or spare parts supplied by anyone other than Nippon Genetics Europe GmbH.
5. Damage caused by accident or misuse.
6. Damage caused by disaster.
7. Corrosion caused by improper solvent or sample.

For any inquiry or request for repair service, contact your local Nippon Genetics Europe GmbH office. Inform Nippon Genetics Europe GmbH of the model and serial number of your instrument.

REGULATORY NOTICE

IMPORTANT: This instrument is designed and certified to meet safety standards and EMC regulations. Certified products are safe to use when operated in accordance with the instruction manual. This instrument should not be modified or altered in any way. Alteration of this instrument will:

1. Void the manufacturer's warranty
2. Void the safety and EMC certification
3. Create a potential safety hazard

Nippon Genetics Europe GmbH is not responsible for any injury or damage caused by the use of this instrument for purposes other than those for which it is intended, or by modifications of the instrument not performed by Nippon Genetics Europe GmbH or an authorized agent.

IMPORTANT NOTICE

Please, read the installation instruction carefully before installing the LED illuminator. This instrument is intended for clinical and research laboratory use with DNA gel activation and it must be operated only by specialized personnel aware of the potential risks associated with the chemical and biological agents normally used with this unit. This instrument is meant for use only by specialized personnel that know the health risks associated with blue light radiation and with reagents that are normally used with this instrument. The amber filter provides some blue light protection. However, it does not guarantee complete protection, and it is designed to shield only the person working in front of the system, also to observe the DNA gel fluorescence emission clearly.

SPECIFICATIONS

- Dimensions (mm): 210D x 210W x 30H
- Viewing surface (mm): 120 x 70
- Wavelength (nm): 470
- Amber filter: amber filter shield with metal frame
- LED arrangements: matrix for two-side illumination
- LED lifetime: 50,000 hours
- Power: 12V DC 2.5 A power adaptor
- Compatible with mini gel size (mm): 110 x 60 & 55 x 60
- Weight (Kg): 2.3

INSTALLATION

Carefully unpack the illuminator and the shield as follow:

1. First remove the bubble material at the top.
2. Remove the illuminator from the two bubble material shells and place it on a stable, horizontal surface.
3. Remove the plastic protection film from the transparent glass viewing surface and the amber filter.

Stand-alone installation

1. The instrument must be placed on a bench leaving at least 10 cm of space all around in order to avoid any obstacle that may reduce the ventilation.
2. Connect the instrument to the power using the annexed cable. The power font must be able to deliver at least 250 VA with a voltage between 100 and 240 Vac. The plug must have a ground connection. The adaptor supplies 12 V DC voltage.

Installation with the Standard Documentation System:

This instrument has been designed to work with the Standard Documentation System. In this case follow the instructions included in the Standard Documentation manual or any other instrument that will be released in the future.

GENERAL PRECAUTIONS

- Plug the illuminator on an electric line with ground connection.
- The illuminator is equipped with thermal protection to prevent overheating.
- Do not pour liquids directly on the illuminator.
- Do not block the aeration slits.
- Switch off the instrument immediately after its use.
- Position the illuminator to prevent harm to nearby operators.
- The illuminator sample surface is a glass sheet for cutting gels. When using the illuminator with samples stained with specific dyes, decontaminate the illuminator surface with bleach. Denatured alcohol can be also used. Always wear disposable gloves.

Using the illuminator

Place gel/sample on the transparent glass support area. It is recommended that gloves be worn to prevent skin contact with gel and staining agents. Press the ON/OFF switch to ON. The LEDs within the unit will begin glowing upon the glass support. After viewing the sample or cutting out the bands, turn the illuminator off.

General Appearance of the LED illuminator

Front Panel of the LED illuminator

Rear Panel of the LED illuminator

Adaptor: 12V DC / 2.5 A Power AC input: 100~240 V; 50/60 Hz power source

TECHNICAL SUPPORT

Nippon Genetics Europe GmbH offers technical support for all of its products. If you have any questions about the product's use or, operation, please contact Nippon Genetics Europe GmbH at the following info.

NIPPON Genetics EUROPE GmbH
Mariaweilerstraße 28-30;
52349 Düren; Germany;
Phone: +492421554960;
Fax: +4924215549611;
E-Mail: info@nippongenetics.de