

# FastGene<sup>®</sup> Blue/Green LED Transilluminator

## Instruction Manual

Catalogue Number FG-08

Version 04/2014

## Hardware Instruction Manual

This LED transilluminator is suitable for research use only

In principle, using FastGene® Blue/Green LED Transilluminator instrument normally won't injure user's eyes, skins, and samples. However, human naked eyes with long time irradiation of blue light may have the probability of suffering from retina diseases. **Therefore we recommend wearing the amber goggle, included in the box.**

### WARRANTY

The FastGene® Blue/Green LED Transilluminator 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 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 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.
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 office. Inform Nippon Genetics Europe of the model and serial number of your instrument.

### REGULATORY NOTICE

**IMPORTANT:** This Nippon Genetics Europe 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 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 or an authorized agent.

### IMPORTANT NOTICE

Please, read the installation instruction carefully before installing the FastGene® Blue/Green LED Transilluminator. 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. **Please wear the amber goggle for your own protection!**

## SPECIFICATIONS

- Dimensions (mm): 270 D x 340 W x 50 H
- Viewing surface (mm): 160 D x 200 W
- Wavelength (nm): 480 – 530 nm
- LED arrangements: matrix for two side illumination
- LED lifetime: 50,000 hours
- Power: 24V DC 1A power adaptor
- Voltage: 100 – 240 V
- Weight: 2,9 kg

## INSTALLATION

*Carefully unpack the transilluminator:*

1. Remove the bubble foil from FastGene® Blue/Green LED Transilluminator and take out the illuminator from the plastic bag.
2. Remove the plastic protection film from the transparent glass viewing surface.

*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 24 V DC voltage.

*Installation with a Standard Documentation System:*

1. 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 FastGene® Blue/Green LED Transilluminator on an electric line with ground connection.
- Do not pour liquids directly on the FastGene® Blue/Green LED Transilluminator.
- Switch off the instrument immediately after its use.
- Position the FastGene® Blue/Green LED Transilluminator to prevent harm to nearby operators.
- Before you switch on the FastGene® Blue/Green LED Transilluminator, wear the amber goggle, provided with the illuminator.
- Decontaminate the transilluminator surface with ddH<sub>2</sub>O. Denatured diluted alcohol can be also used. Always wear disposable gloves.

## USING THE TRANSILLUMINATOR

Place gel/sample on the transparent glass support area. It is recommended that researchers place the gels on a Gel-Tray to protect the glass surface from cuts and scratches. 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 beneath the glass support. After viewing the sample, turn the transilluminator off.

## General Appearance of the LED transilluminator



FastGene® Blue/Green LED Transilluminator



Amber Goggle

## TECHNICAL SUPPORT

Nippon Genetics Europe 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 at the following info.

Nippon Genetics Europe  
Binsfelder Strasse 77  
D-52351 Dueren  
Germany

Phone: +49 (0)2421 2084690  
Fax : +49 (0)2421 2084691  
Email: [info@nippongenetics.de](mailto:info@nippongenetics.de)