

NextSeq 1000 and NextSeq 2000

Safety and Compliance Guide



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This guide provides important safety information pertaining to the installation, servicing, and operation of the Illumina® NextSeq® 1000 and NextSeq® 2000 Sequencing Systems and associated Compute Server. This guide includes product compliance and regulatory statements. Read this document before performing any procedures on the system.

The country of origin and date of manufacture of the system are printed on the instrument label.

Safety Considerations and Markings

This section identifies potential hazards associated with installing, servicing, and operating the instrument. Do not operate or interact with the instrument in a manner that exposes you to any of these dangers.

All described hazards can be avoided by following the standard operating procedures included in the *NextSeq 1000 and 2000 Sequencing System Guide (document # 1000000109376)*.

General Safety Warnings

Make sure that all personnel are trained in the correct operation of the instrument and any potential safety considerations.



Follow all operating instructions when working in areas marked with this label to minimize risk to personnel or the instrument.

Laser Safety Warning



The instrument is a Class 1 laser product that contains three Class 4 lasers.

Class 4 lasers present an eye hazard from direct and diffuse reflections. Avoid eye or skin exposure to direct or reflected Class 4 laser radiation. Class 4 lasers can cause combustion of flammable materials and produce serious skin burns and injury from direct exposure.

Do not operate the instrument with any of the panels removed. When the visor is down, safety interlock switches shut power off to the laser engines. If you operate the instrument with any panels removed, you risk exposure to direct or reflected laser light.

Electrical Safety Warnings

Do not remove the outer panels from the instrument. There are no user-serviceable components inside. Operating the instrument with any of the panels removed creates potential exposure to line voltage and DC voltages. To prevent electrical shock do not remove piezo cover. There are no procedures that require this cover to be removed. This cover prevents access to 120 Vdc.



The instrument is powered by 100–240 volts AC operating at 50–60 Hz. Hazardous voltage sources are located behind the rear and right side panel, but can be accessible if other panels are removed. Some voltage is present on the instrument even when the instrument is turned off. Operate the instrument with all panels intact to avoid electrical shock.

Power Specifications

Table 1 Instrument Power Specifications

Type	Specification
Line Voltage	100–240 Volts AC @ 50/60 Hz
Power Supply Rating	750 Watts, maximum

Table 2 Server Power Specifications

Type	Specification
Line Voltage	24 Volts DC, 23A
Power Supply Rating	552 Watts, maximum

Electrical Connections

Connect the instrument to a grounded circuit capable of delivering at least:

- 15 Amps for a 100–110 Volt power source
- 10 Amps for a 220–240 Volt power source

For more information, see the *NextSeq 1000 and 2000 Sequencing System Site Prep Guide* (document # 1000000109378).

Protective Earth



The instrument has a connection to protective earth through the enclosure. The safety ground on the power cord returns protective earth to a safe reference. The protective earth connection on the power cord must be in good working condition when using this device.

Fuses

The instrument contains no user-replaceable fuses.

Hot Surface Safety Warning

Do not operate the instrument with any of the panels removed.

Heavy Object Safety Warning



The instrument weighs approximately 141 kg (311 lb) and the server weighs approximately 16.1 kg (35 lb) and can cause serious injury if dropped or mishandled.

Mechanical Safety Warning

Keep fingers away from the LED visor during loading or unloading of the reagent cartridge.

Uncrating, Installing, and Moving

Only personnel authorized by Illumina can uncrate, install, or move the instrument or server. If you must relocate the instrument, contact your Illumina representative.

Environmental Considerations

Element	Specification
Temperature	Maintain a lab temperature of 15°C to 30°C. This temperature is the operating temperature of the instrument. During a run, do not allow the ambient temperature to vary more than $\pm 2^\circ\text{C}$. Maximum temperature for the Compute Server is 40°C.
Humidity	Maintain a noncondensing relative humidity between 20–80%.
Elevation	Locate the instrument at an altitude below 2000 meters (6500 feet).
Air Quality	Operate the instrument in an indoor environment with air particulate cleanliness levels per ISO 14644-1 Class 9 (ordinary room / laboratory air), or better. Keep instrument away from sources of dust. For indoor use only.
Ventilation	Consult your facilities department for ventilation requirements based on the instrument heat output specifications.
Vibration	Limit the continuous vibration of the lab floor to ISO office level. During a sequencing run, do not exceed ISO operating room limits. Avoid intermittent shocks or disturbances near the instrument.

Product Compliance and Regulatory Statements

Simplified Declaration of Conformity

Illumina, Inc. hereby declares that the NextSeq 1000 and NextSeq 2000 is in compliance with the following Directives:

- EMC Directive [2014/30/EU]
- Low Voltage Directive [2014/35/EU]
- RED Directive [2014/53/EU]

Illumina, Inc. hereby declares that the Compute Server is in compliance with the following Directives:

- RoHS Directive [2011/65/EU] as amended by EU 2015/863

The full text of the EU Declaration of Conformity is available at the following internet address:
support.illumina.com/certificates.html.

Restriction of Hazardous Substances (RoHS)



This label indicates that the instrument meets the WEEE Directive for waste.

Visit support.illumina.com/certificates.html for guidance on recycling your equipment.

Human Exposure to Radio Frequency

This equipment complies with maximum permissible exposure (MPE) limits for the general population per Title 47 CFR § 1.1310 Table 1.

This equipment complies with the limitation of human exposure to electromagnetic fields (EMFs) for devices operating within the frequency range 0 Hz to 10 GHz, used in radio frequency identification (RFID) in an occupational or professional environment. (EN 50364:2010 sections 4.0.)

FCC Compliance

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.



Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.



This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instrumentation manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case users will be required to correct the interference at their own expense.

Shielded Cables

Shielded cables must be used with this unit to ensure compliance with the Class A FCC limits.

IC Compliance

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

This device complies with Industry Canada license-exempt RSS standards. Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

EMC Considerations

This equipment has been designed and tested to the CISPR 11 Class A standard. In a domestic environment, it might cause radio interference. If radio interference occurs, you might need to mitigate it.

Do not use the device in close proximity to sources of strong electromagnetic radiation, which can interfere with proper operation.

Evaluate the electromagnetic environment before operating the device.

Korea Compliance

해당 무선 설비는 운용 중 전파 혼신 가능성이 있음.

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United Arab Emirates Compliance

- TRA Registered Number: ER0117765/13
- Dealer Number: DA0075306/11

Thailand Compliance

This telecommunication equipment conforms to the requirements of the National Telecommunications Commission.

China Compliance

警告

此为A級产品，在生活环境中，该产品可能会造成无线电干扰。在这种情况下，可能需要用户对干扰采取切实可行的措施。

仅适用于非热带气候条件下安全使用

仅适用于海拔2000m一下地区安全使用

Taiwan Compliance

警告使用者

這是甲類的資訊產品

在居住的環境中使用時

可能會造成射頻干擾, 在這種情況下

使用者會被要求採取某些適當的對策

Taiwan Integrated Compute Server Compliance

本產品為國內裝置使用時，其電源僅限使用架構電源模組所提供電源直流輸入，不得使用交流電源及附加其他電源轉換裝置提供電源者，其電源輸入電壓及電流請依說明書規定使用

Japan Compliance

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Revision History

Document	Date	Description of Change
Document # 1000000111928 v04	November 2020	Added Taiwan compute server compliance statement.
Document # 1000000111928 v03	October 2020	Updated Korean compliance statement.
Document # 1000000111928 v02	May 2020	Added compliance information for Compute Server.
Document # 1000000111928 v01	April 2020	Added Japan compliance statement.
Document # 1000000111928 v00	March 2020	Initial release.

