HID NIMBUS® Systems

Publication Number MAN0026468 Revision D

Customer Concierge contact information

Note: If your site or region is not covered by customer Concierge service, contact your local Thermo Fisher Scientific service and support representatives for site preparation and instrument installation.

We are here to help. Send your questions to:

Location	Concierge for your region
North America	AMER.Concierge@thermofisher.com
Europe, Middle East, and Africa	EMEA.Concierge@thermofisher.com
Asia-Pacific and Japan	APJ.Concierge@thermofisher.com

Note: Complete the site preparation checklist (see “Site preparation checklist” on page 3), then send the checklist to your Concierge team. If your region is not supported by one of the teams listed above, email the completed checklist to your field application scientist.

ThermoFisher SCIENTIFIC

Site preparation workflow

IMPORTANT! Thermo Fisher Scientific does not install, service, or repair products in area designated BioSafety Level 3 (BSL-3) or BioSaftey Level 4 (BSL-4).

A Thermo Fisher Scientific service representative will contact you to schedule the installation. When the installation date is scheduled, perform the following tasks.

Site preparation

Review this guide

Begin the site preparation checklist

See "Site preparation checklist" on page 3.

Receive and inspect the shipment

See "Receive and inspect the shipment" on page 11.

Move the packaged shipment to the installation site

See "Move the packaged shipment to the installation site" on page 11.

Complete the site preparation checklist

See "Site preparation checklist" on page 3.

Installation time and training

After the shipment is unpacked, the installation takes approximately two business days.

During and/or after installation, the service representative calibrates the instrument, performs run verification, reviews data, and provides some basic operator training. For additional training and reference information, see the user documents that are provided with the product.

Site preparation checklist

IMPORTANT! Before the scheduled installation date, complete, date, and initial all items in the following site preparation checklist, then sign and return the checklist to your regional concierge team. If the checklist is not completed and returned before the service representative arrives, the scheduled installation may be postponed. Any requirement that falls outside the acceptable environmental range can impact instrument performance.

✓	Date	Initials	Site preparation requirement	See page
☐			Customer responsibilities have been reviewed.	4
☐			Personnel have been assigned tasks and responsibilities.	
☐			The installation site is identified and meets the following requirements:	
			☐ Space and clearance	6
			☐ Environmental	7
			☐ Electrical	8
			☐ Safety	9
☐			The shipment was received and inspected as follows:	11
			☐ The items shown on the shipping list are the items that were ordered at the time of purchase.	
			☐ Damage to shipping containers was reported to the shipping company that delivered the shipment and to your service representative.	
			☐ Damage or mishandling was recorded on the shipping documents.	
			☐ If provided with the shipment, all reagents and plates are unpacked and stored as specified on package labels.	
☐			The installation site is cleared and ready for the installation.	11
☐			The packaged shipping containers are moved to the installation site.	
☐			All materials for installation, qualification, and operation are available.	10

I acknowledge that all site preparation requirements are understood and have been initialized.

Signature **Date**

Customer responsibilities

Personnel	Responsibilities and tasks to perform before the installation date
Site preparation/ installation coordinator	• Reviews the site preparation guide for site requirements. • Coordinates personnel and tasks. • Selects the installation site. • Reviews checklists with applicable personnel to verify that the site is properly prepared. • Reviews checklists with the service representative to verify that the site is properly prepared.[1] • Receives and inspects the packaged shipment. • Unpacks and stores the reagents box (if provided) according to the specifications indicated in the product information sheets. • Schedules the installation and informs personnel of the installation day. • Ensures that the site is clear of unnecessary material on the installation day. • Is available to assist the service representative throughout installation.[1]
Laboratory safety representative	• Reviews the safety requirements later in this guide. • Ensures that all customer-provided materials for installation are present at the site. • Ensures that primary users (responsible for training other users) are available for training during the installation.
Laboratory personnel/ primary users	• Reviews the safety requirements later in this guide. • Ensures that all customer-provided materials for installation are present at the site. • Ensures that primary users (responsible for training other users) are available for training during the installation.
Facilities personnel	• Ensures that the installation requirements are met for the installation site. – Space at the installation site – Building clearances – Humidity and temperature – Waste collection – Electrical supply – Computer (if included with product) – Safety and installation materials • Moves the packaged shipment to the site before the installation date. • Is available to assist service representative and laboratory personnel. • If applicable, ensures that at least two people are available to help the service representative move and position the instrument.

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Personnel	Responsibilities and tasks to perform before the installation date
Network or IT specialist (if the product will be connected to a network)	• Ensures that active, tested local area network (LAN) connections are in place. • Ensures that network hardware is compatible with an RJ45-type connector. • If necessary, supplies additional cables. • Is available during installation to connect the product to the network. • If applicable, provides and installs a network or dedicated printer. • If applicable, provides and installs recommended antivirus software for network connected instruments. ⚠ **CAUTION!** Do not connect the product components to the network before the service representative arrives.

[1] Required for service representative installation of the instrument.

Site requirements

Dimensions and weights

To prepare for installation, provide space for receipt and configuration of the components listed in this section. This section provides dimensions and weights for the packages you will receive, and it describes the dimensions of the components after installation and configuration.

Components (packaged)

Ensure that the building clearances allow for transport of the packaged components.

Package	Height	Length (depth)	Width	Weight
System[1]	127 cm (50 in)	175.3 cm (69 in)	101.6 cm (40 in)	158.8 kg (350 lb)
Computer (laptop)	19.1 cm (7.5 in)	52.1 cm (20.5 in)	40.1 cm (15.8 in)	4.54 kg (10 lb)

[1] For systems that include the KingFisher™ Presto Purification System.

⚠ **CAUTION! PHYSICAL INJURY HAZARD.** Do not attempt to lift or move the instrument without the assistance of others, the use of appropriate moving equipment, and proper lifting techniques. Improper lifting can cause painful and permanent back injury. Depending on the weight, moving or lifting an instrument may require two or more people.

Components (unpackaged)

Ensure that the installation site bench space can accommodate the dimensions and support the weights of the components.

Component	Height	Length (depth)	Width	Weight
System[1]	88.9 cm (35 in) with door closed 130 cm (51.2 in) with door opened	135.9 cm (53.5 in)	70.9 cm (27.9 in)	Approximately 112.1 kg (247 lb)
Computer (laptop)	2.45 cm (0.95 in)	135.9 cm (53.5 in)	35.78 cm (14.09 in)	1.79 kg (3.95 lb)

[1] For systems that include the KingFisher™ Presto Purification System.

CAUTION! PHYSICAL INJURY HAZARD. Do not attempt to lift or move the instrument without the assistance of others, the use of appropriate moving equipment, and proper lifting techniques. Improper lifting can cause painful and permanent back injury. Depending on the weight, moving or lifting an instrument may require two or more people.

Component clearances required for installation and maintenance

During installation and maintenance, it is necessary to access the back and sides of the product. If the back of the product faces a wall, ensure that there is sufficient clearance on the bench to rotate the product.

IMPORTANT! For safety reasons, the power outlet into which the instrument is plugged and the power receptacle on the rear of the instrument must be accessible at all times.

Bench	Minimum clearance
Length (depth)	• >100 cm (39.37 in.) for a bench against a solid vertical surface • >25.4 cm (10 in.) of clearance at the back of the instrument for air flow, service access, and cable routing. • If the bench is at least 25.4 cm. (10 in.) from a wall, the bench can be 76.2 cm. (30 in.) deep. • If the bench has wheels, it can facilitate access to the back of the instrument.
Width	>158 cm (62 in.) for the system.

Note: *(If required)* The recommended workbench (Fisherbrand™ Kennedy Series Workbench With 1 in. Thick Phenolic Resin Top - 36 in. Deep, Cat. No. 25-100-254) can be ordered through the Fisher Scientific™ website: **fisherscientific.com**

Environmental requirements

Condition	Acceptable range
Installation site	Indoor use only.
Electromagnetic interference	Do not use this device in close proximity to sources of strong electromagnetic radiation (for example, unshielded intentional RF sources). Strong electromagnetic radiation may interfere with the proper operation of the device.
Altitude	Located between sea level and 2,000 m (6,500 ft.) above sea level.
Humidity (system)	Operation: 30%–80% (noncondensing)
Power supply	UL/CSA/CE-approved universal power supply with IEC connection.
Transient category	Installation categories II
Overvoltage category	Installation categories II
Vibration	The instrument is not adjacent to strong vibration sources, such as a centrifuge, pump, or compressor. Excessive vibration will affect instrument performance.
Pollution degree	II Install the instrument in an environment that is free of pollutants other than non-conductive pollutants such as dust particles or wood chips. Typical environments with a Pollution Degree II rating are laboratories and sales and commercial areas.
Operating conditions	15°C to 35°C (60°F to 95°F) **Note:** The room temperature must not fluctuate more than 2°C over a 2-hour period.
Liquid waste collection	Dispose of the polymer, buffer, reagents and any liquid waste as hazardous waste in compliance with local and national regulations.
Other conditions	Ensure the room is away from any vents that could expel particulate material on the components. Avoid placing the instrument and computer adjacent to heaters, cooling ducts, or in direct sunlight.

Electrical requirements

CAUTION! Do not unpack or plug in any components until they are configured for the proper operating voltage by the service representative.

WARNING! For safety, the power outlet for the instrument must be accessible at all times. See "Component clearances required for installation and maintenance" on page 6 for information about the space needed between the wall and the instrument. In case of emergency, you must be able to immediately disconnect the main power supply to all the equipment. Allow adequate space between the wall and the equipment so that the power cords can be disconnected in case of emergency.

- Dedicated line and ground between the instrument and the main electrical service.
- Maximum power dissipation: ~417 VA, 371 W.
- Mains AC line voltage tolerances must be up to ±10 percent of nominal voltage.

Device	Rated voltage	Circuit required	Rated frequency	Rated power
System	100–240 ±10% VAC[1]	5 A	50–60 Hz	600 W
Computer (laptop)	100–240 ±10% VAC	10 A	50–60 Hz	90 VA

[1] If the supplied power fluctuates beyond the rated voltage, a power line regulator may be required. High or low voltages can adversely affect the electronic components of the instrument.

Electrical protective devices

We recommend several protective devices in environments with large voltage and power fluctuations.

Recommended devices
Power line regulator
• 1.5-kVA power line regulator. • Use in areas where the supplied power fluctuates in excess of ±10% of the normal voltage. • Power fluctuations can adversely affect the function of the instrument and computer. **Note:** A power line regulator monitors the input current and adjusts the power supplied to the instrument or computer. It does not protect against a power surge or failure.
Surge protector
• 10-kVA surge protector (line conditioner). • Use in areas with frequent electrical storms or near devices that are electrically noisy, such as refrigerators, air conditioners, or centrifuges. • Short-duration, high-voltage power fluctuations can abruptly terminate the function of, and thereby damage the components of the system. **Note:** A dedicated line and ground between the system and the building's main electrical service can also prevent problems caused by power fluctuations.

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Recommended devices
Uninterruptible power supply (UPS)
• 1.5-kVA uninterruptible power supply (UPS). • Use in areas prone to power failure. • Power failures and other events that abruptly terminate the function of the instrument and computer can corrupt data and possibly damage the system. ⚠ **CAUTION! PHYSICAL INJURY HAZARD.** Do not attempt to lift or move the UPS unit without the assistance of at least two people. Improper lifting can cause painful and permanent back injury. See the UPS manufacturer user guide for more information. **IMPORTANT!** A UPS provides power for a limited time. It is meant to delay the effects of a power outage, not to serve as a replacement power source. In the event of a power loss, power off the instrument and computer unless you expect to regain power within the battery life of the UPS.

Safety requirements

Safety practices

A safety representative from your facility must ensure that:

- Personnel establish and follow all applicable safety practices and policies to protect laboratory personnel from potential hazards.
- All applicable safety devices and equipment are available at all times.

Required safety equipment

Your laboratory has specific safety practices and policies designed to protect laboratory personnel from potential hazards that are present. Follow all applicable safety-related procedures at all times.

The following safety equipment and protection from hazards must be available at the installation site:

- Protection from any sources of hazardous chemicals, radiation (for example, lasers, radioisotopes, radioactive wastes, and contaminated equipment), and potentially infectious biological material that may be present in the area where the service representative will work.
- Appropriate fire extinguisher:
  - You are responsible for providing an appropriate fire extinguisher for use on or near the equipment.
  - The types and sizes of fire extinguishers shall be suitable for use on electrical and chemical fires as specified in current codes, regulations, and/or standards, and with approval of the Fire Marshall or other authority having jurisdiction.
  - The installation of appropriate fire extinguishers shall be in addition to other fire-protection systems and not as a substitute or alternative to them.
- Eyewash
- Safety shower

- Eye and hand protection
- Adequate ventilation, including vent line/fume hood, if applicable
- Biohazard waste container, if applicable
- First-aid equipment
- Spill cleanup equipment
- Applicable Safety Data Sheets (SDSs)

Computer requirements

IMPORTANT! We require use of the computer that is provided with the HID NIMBUS® system. This computer is validated for use with Thermo Fisher Scientific software, which may have different operating system settings than a commercially available computer. Specific operating system settings are required for the proper operation of Thermo Fisher Scientific software.

Minimum computer requirements:

- Memory—4 GB RAM
- Processor—2.33 GHz
- Hard Drive—80 GB
- Operating system—Windows™ 10 (64-bit)
- Graphics card—Graphics Card with Direct X 10.0 support
- *(Recommended)* Ethernet port (RJ45, CAT5E) for connection to the instrument
- Serial port for connection to the VFV kit balance
- Microsoft .NET Framework 3.5
- Additional USB and/or RS232 ports, as needed, for integrated devices

Note: An RS232-to-USB adaptor may be used.

Materials for installation and operation

Installation materials

Ensure that the following materials are available before installation of the product:

- Moving equipment that can accommodate the weights and dimensions of the shipping container (see “Components (unpackaged)” on page 6)
- Safety glasses, lab coats, and chemical-resistant, disposable gloves (powder-free)
- Mobile bench to allow access to the instrument for maintenance and service
- Easily accessible specified power outlet
- Refrigerator or cold-room (4°C)

- Lint-free tissues
- *(Optional)* Electrical protective devices (universal power supply unit, surge protector, and/or power line regulator)

Operation materials

Additional supplies and consumables are necessary for routine operation. Contact a sales representative to order these additional supplies. Use only supplies as specified by Thermo Fisher Scientific.

Receive and inspect the shipment

1. Verify that the items shown on the shipping list are the items that were ordered at the time of purchase.
2. Carefully inspect the shipping containers. Take photographs of any damage, then report the damage to the shipping company and to your service representative. Record any damage or mishandling on the shipping documents.

IMPORTANT! Do not unpack the instrument shipping containers at this time. To protect yourself from liability for damage that occurred during shipping, inspect the shipping containers and report damage as described above.

Move the packaged shipment to the installation site

1. Clear the installation site of all unnecessary materials.
2. Move the packaged shipment to the installation site.

CAUTION! PHYSICAL INJURY HAZARD. Do not attempt to lift or move the instrument without the assistance of others, the use of appropriate moving equipment, and proper lifting techniques. Improper lifting can cause painful and permanent back injury. Depending on the weight, moving or lifting an instrument may require two or more people.

CAUTION! Do not tip the package on end. Tipping may damage the hardware and electronics.

Note: After installation, keep the packaging in case you need to relocate the components.

Download and install the software for DNA purification workflows

Install BindIt™ Software v4.0

This procedure is required only if BindIt™ Software v4.0 is not already installed on the HID NIMBUS® Presto System or HID NIMBUS® Presto QNA System computer.

1. Download BindIt™ Software v4.0 from **https://www.thermofisher.com/us/en/home/global/forms/life-science/download-bindit-software-kingfisher-instruments.html**.

2. Double click the setup.exe file to launch the installer, then follow the prompts to install the software.

Download and install the PrepFiler™ Presto protocol (BDZ)

1. Ensure that BindIt™ Software v4.0 is installed on the HID NIMBUS® Presto System or HID NIMBUS® Presto QNA System computer.

2. From the HID NIMBUS® Presto System or HID NIMBUS® Presto QNA System computer, navigate to `C:\Program Files (x86)\Hamilton\HID Nimbus System\PrepFiler Purification\Resources\Presto File`. Locate the PrepFiler_Forensic_Presto_Rev02.bdz protocol.

3. In the BindIt™ Software, select the **Home** tab, then click **Connect** to establish connection with the KingFisher™ Presto Purification System.

4. Load the PrepFiler_Forensic_Presto_Rev02.bdz protocol into the BindIt™ Software: Select **Home** ▸ **Open**, navigate to the saved protocol (from step 2), then open the protocol to load it into the BindIt™ Software.

Note: Alternatively, you can transfer the protocol to the KingFisher™ Presto Purification System, which allows you to run the protocol directly from the instrument instead of the computer.

To transfer the protocol to the KingFisher™ Presto Purification System: In the BindIt™ Software, select **Home** ▸ **Transfer**, select **Upload**, navigate to the saved protocol (from step 2), then click **Open** to save the protocol to the instrument memory.

Documentation and support

Related documentation

Document	Publication number
PrepFiler™ and PrepFiler™ BTA Automated Forensic DNA Extraction Kits: Automated DNA Purification on the HID NIMBUS® Presto Systems User Bulletin	MAN0019368
Automated DNA Quantification, Normalization, and Amplification Setup User Bulletin	MAN1000064
Quantifiler™ Trio Automated DNA Quantification Kit User Guide	MAN1000066

Customer and technical support

Visit **thermofisher.com/support** for the latest service and support information.

- Worldwide contact telephone numbers
- Product support information
  - Product FAQs
  - Software, patches, and updates
  - Training for many applications and instruments
- Order and web support
- Product documentation
  - User guides, manuals, and protocols
  - Certificates of Analysis
  - Safety Data Sheets (SDSs; also known as MSDSs)

Note: For SDSs for reagents and chemicals from other manufacturers, contact the manufacturer.

Limited product warranty

Life Technologies Corporation and its affiliates warrant their products as set forth in the Life Technologies' General Terms and Conditions of Sale at **www.thermofisher.com/us/en/home/global/terms-and-conditions.html**. If you have questions, contact Life Technologies at **www.thermofisher.com/support**.

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For descriptions of symbols on product labels or product documents, go to thermofisher.com/symbols-definition.

Revision history: MAN0026468 D (English)

Revision	Date	Description
D	5 March 2025	• The site preparation checklist was updated. See "Site preparation checklist" on page 3. • A recommended bench was added. See "Component clearances required for installation and maintenance" on page 6.
C00	14 March 2024	• The related documentation was updated. • The product name was updated to include the multiple configurations.
B.0	3 March 2023	• Customer Concierge contact information was added. • The manufacturing site address was updated.
A.0	12 July 2022	New document for the HID NIMBUS® Presto System.