# iSeq 100 Sequencing System

## Site Prep Guide

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## Introduction

This guide provides specifications and guidelines for preparing your site for installation and operation of the Illumina® iSeq™ 100 Sequencing System.

▶ Delivery and installation considerations

▶ Laboratory space requirements

▶ Electrical requirements

▶ Environmental constraints

▶ Computing requirements

▶ User-supplied consumables and equipment

## Safety Considerations

See the *iSeq 100 Sequencing System Safety and Compliance Guide (document # 1000000035336)* for important information about safety considerations.

## Additional Resources

The iSeq 100 Sequencing System support pages on the Illumina website provide additional system resources. These resources include software, training, compatible products, and the following documentation. Always check support pages for the latest versions.

| Resource | Description |
|---|---|
| *Custom Protocol Selector* | A tool for generating end-to-end instructions tailored to your library prep method, run parameters, and analysis method, with options to refine the level of detail. |
| *iSeq 100 Sequencing System Setup Poster (document # 1000000035963)* | Provides instructions for instrument installation and initiating first time setup. |
| *iSeq 100 Sequencing System Safety and Compliance Guide (document # 1000000035336)* | Provides information about operational safety considerations, compliance statements, and instrument labeling. |
| *RFID Reader Compliance Guide (document # 1000000002699)* | Provides information about the RFID reader in the instrument, including compliance certifications and safety considerations. |
| *iSeq 100 Sequencing System Guide (document # 1000000036024)* | Provides an overview of the instrument and associated procedures. Instrument components, reagent components, instructions for use, and maintenance and troubleshooting procedures are included. |

## Delivery and Installation

The iSeq 100 System is a user-installable system. Installation instructions are provided in the *iSeq 100 Sequencing System Setup Poster (document # 1000000035963),* which is shipped with the instrument.

After installation, you can move the instrument to access the USB ports and other rear panel components. For detailed instructions on relocating the instrument, see the *iSeq 100 Sequencing System Guide (document # 1000000036024).*

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# First Time Setup

Unpacking and installing the iSeq 100 System takes about 30 minutes. Installation includes connecting the instrument to power and network sources, turning it on, and following onscreen prompts to perform a system check and configure the software. The system check requires the reusable test cartridge and reusable test flow cell.

Prepare the lab space in advance so that you are ready to unpack and install the system upon delivery. If you are connecting the instrument to network storage, determine the network before installation.

> **NOTE**
>
> Adding the system to a network can take extra time. As part of the installation process, Illumina recommends early engagement with your IT representative. For more information, see *Host Network and Control Computer Guidelines* on page 9.

All components needed for installation are shipped with the instrument. Additional tools are not necessary.

## Password Change

The Windows operating system has two accounts: administrator (sbsadmin) and standard user (sbsuser). The first time you sign in to the operating system, you must change the password for both accounts.

The operating system displays the user name and default password for each account. Copy the password for sbsadmin and then for sbsuser to complete the required password change. The new passwords must contain at least 10 characters.

Continue with first time setup in sbsuser. If you want to customize the network settings, switch to sbsadmin.

## Shipping Box Contents

The instrument and components are shipped in one brown shipping box. The brown shipping box contains two boxes: a white box containing the instrument and an accessories box labeled iSeq 100 Sequencing System Accessories.

The following components are included:

▶ Ethernet cable

▶ Power cord

▶ iSeq 100 Reusable Test Cartridge

▶ iSeq 100 Reusable Test Flow Cell

▶ iSeq 100 Spare Air Filter

▶ iSeq 100 Spare Drip Tray Pad

▶ *iSeq 100 Sequencing System Setup Poster (document # 1000000035963)*

▶ *Important Customer Information (document # 1000000047543)*

> **NOTE**
>
> Guides not shipped with the instrument, including the system guide, are available online. See *Additional Resources* on page 3.

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## Box Dimensions

Use the following box dimensions to determine transport, setup, and storage plans.

Table 1   Brown Box

| Measurement | Dimension |
| --- | --- |
| Height | 49.5 cm (19.5 in) |
| Width | 56.3 cm (21 in) |
| Depth | 58.4 cm (23 in) |
| Weight | 21 kg (47 lb) |

Table 2   White Box

| Measurement | Dimension |
| --- | --- |
| Height | 35.6 cm (14 in) |
| Width | 43.2 cm (17 in) |
| Depth | 43.2 cm (17 in) |
| Weight | 17 kg (38 lb) |

Table 3   Accessories Box

| Measurement | Dimension |
| --- | --- |
| Height | 8.9 cm (3.5 in) |
| Width | 33 cm (13 in) |
| Depth | 21.6 cm (8.5 in) |
| Weight | 0.82 kg (1.8 lb) |

## Storing Spares and Reusable Test Components

Store the following components at room temperature in the original packaging: reusable test cartridge, reusable test flow cell, spare air filter, and spare drip tray pad. Remove from storage as needed for system maintenance and troubleshooting:

▶ After first-time setup, the reusable test cartridge and flow cell perform any future system checks. Replace after 5 years or 36 uses, whichever comes first.

▶ Six months after first time setup, the spare air filter replaces the installed air filter.

▶ If a leak ever occurs, the spare drip trip pad replaces the installed drip tray pad.

## Laboratory Requirements

Use the specifications and requirements provided in this section to set up your lab space.

## Instrument Dimensions



| Measurement | Installed Instrument Dimensions |
|---|---|
| Height (raised monitor) | 42.5 cm (16.8 in) |
| Width | 30.5 cm (12 in) |
| Depth | 33 cm (13 in) |
| Weight | 16 kg (35 lb) |

## Placement Requirements

Position the instrument to allow proper ventilation and access for servicing. Use the following minimum clearance dimensions to make sure that the instrument is accessible from all sides.

| Access | Minimum Clearance |
|---|---|
| Sides | Allow at least 30 cm (12 in) on each side of the instrument. |
| Rear | Allow at least 15.25 cm (6 in) behind the instrument. |
| Top | Allow at least 30 cm (12 in) above the instrument (lowered monitor). |

► Make sure that you can reach around the right side of the instrument to access the power switch on the back panel.

► Position the instrument so that you can quickly disconnect the power cord from the outlet.

## Lab Bench Guidelines

The instrument includes precision optical elements. Place the instrument on a sturdy and level lab bench away from sources of vibration.

## Vibration Guidelines

During sequencing runs, use the following best practices to minimize continuous and intermittent vibrations and ensure optimal performance.

- ▶ Keep the lab bench free of potential vibration sources, such as:
  - ▶ Shakers, vortex mixers, centrifuges, drawers, cabinets, and shelves that can cause unintentional shocks to the bench surface.
  - ▶ Pressurized air or nitrogen and other major air flows.
- ▶ Keep the clearance area free of clutter.
- ▶ Do not place used consumables or other lab tools and accessories on the instrument.
- ▶ When interacting with the instrument, use only the touch screen monitor and the recommended workflow for loading and unloading consumables.
- ▶ Do not directly impact instrument surfaces.

## Storage Requirements for iSeq 100 i1 Reagent

The following table provides storage temperature and dimensions for components included in the iSeq 100 i1 Reagent.

| Component | Storage Temperature | Length | Width | Height |
|---|---|---|---|---|
| Cartridge | -25°C to -15°C | 19.6 cm (7.7 in) | 13.7 cm (5.4 in) | 13 cm (5 in) |
| Flow cell | 2°C to 8°C* | 10.2 cm (4 in) | 10.2 cm (4 in) | 2.5 cm (1 in) |

*Shipped at room temperature.

## Lab Setup for PCR Procedures

Some library prep methods require the polymerase chain reaction (PCR) process.

Establish dedicated areas and lab procedures to prevent PCR product contamination before you begin work in the lab. PCR products can contaminate reagents, instruments, and samples, delaying normal operations and causing inaccurate results.

### Pre-PCR and Post-PCR Areas

Use the following guidelines to avoid cross-contamination.

- ▶ Establish a pre-PCR area for pre-PCR processes.
- ▶ Establish a post-PCR area for processing PCR products.
- ▶ Do not use the same sink to wash pre-PCR and post-PCR materials.
- ▶ Do not use the same water purification system for pre-PCR and post-PCR areas.
- ▶ Store supplies used for pre-PCR protocols in the pre-PCR area. Transfer them to the post-PCR area as needed.

### Dedicate Equipment and Supplies

- ▶ Do not share equipment and supplies between pre-PCR and post-PCR processes. Dedicate a separate set of equipment and supplies in each area.
- ▶ Establish dedicated storage areas for consumables used in each area.

## Electrical Requirements

### Power Specifications

| Type | Specification |
|------|---------------|
| Line Voltage | 100–240 VAC at 50/60 Hz |
| Peak Power Consumption | 80 Watts |

An electrical ground is required. If the voltage fluctuates more than 10%, a power line regulator is required.

### 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.

### Power Cords

The instrument has an international standard IEC 60320 C13 receptacle and is shipped with a region-specific power cord. The North American cord is 2.44 m (8 ft) long. All other cords are 2.5 m (8.2 ft) long. To obtain equivalent receptacles or power cords that comply with local standards, consult a third-party supplier such as Interpower Corporation (www.interpower.com).

Hazardous voltages are removed from the instrument only when the power cord is disconnected from the AC power source.

### Fuses

The power entry module includes two input fuses on the high-voltage input lines. These fuses are size 5 mm × 20 mm and rated for 10 Amps, 250 VAC, Slow Blow.

## Uninterruptible Power Supply

Illumina recommends using a regionally appropriate uninterruptible power supply (UPS) with a capacity of at least 500 VA. The following table provides three example models. Run time (battery power duration) depends on the selected UPS model and the UPS battery age and quality.

Table 4   Region-Specific Recommendations

| Specification | Japan APC Smart-UPS 750 LCD 100 V Part # SMT750J | North America APC Smart-UPS 750 VA LCD 120 V US Part # SMT750US | International APC Smart-UPS 750 VA LCD 230 V Part # SMT750I |
|------|------|------|------|
| Maximum Output Power | 500 W / 750 VA | 500 W / 750 VA | 500 W / 750 VA |
| Input Voltage (nominal) | 100 VAC | 120 VAC | 230 VAC |
| Input Connection | NEMA 5-15P | NEMA 5-15P | IEC-320 C14 Schuko CEE 7/EU1-16P British BS1363A |

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| Specification | Japan<br>APC Smart-UPS<br>750 LCD 100 V<br>Part # SMT750J | North America<br>APC Smart-UPS<br>750 VA LCD 120 V US<br>Part # SMT750US | International<br>APC Smart-UPS<br>750 VA LCD 230 V<br>Part # SMT750I |
|---|---|---|---|
| Dimensions<br>(H × W × D) | 16.7 cm × 14 cm × 36 cm<br>(6.6 in × 5.5 in × 14.2 in) | 16 cm × 13.8 cm × 36.3 cm<br>(6.3 in × 5.4 in × 14.3 in) | 15. 7 cm × 13.8 cm × 35.8 cm<br>(6.2 in × 5.4 in × 14 in) |
| Weight | 13.2 kg (29 lb) | 13.2 kg (29 lb) | 13.2 kg (29 lb) |
| Approximate UPS-<br>powered run time | ~95 minutes | ~95 minutes | ~95 minutes |

Illumina is not responsible for runs affected by interrupted power, regardless of whether the instrument is connected to a UPS. Standard generator-backed power can be interrupted, so a brief power outage before power resumes is typical.

## Environmental Considerations

| Element | Specification |
|---|---|
| Temperature | Maintain a lab temperature of 15°C to 30°C (22.5°C ±7.5°C). During a run, do not allow the ambient temperature to vary more than ±2°C. |
| Humidity | Maintain a noncondensing relative humidity between 20–80%. |
| Elevation | Locate the instrument at an elevation below 2000 meters (6500 feet). |
| Air Quality | Operate the instrument in an indoor environment. Maintain air particulate cleanliness levels per ISO 9 (ordinary room air), or better. |
| Vibration | Limit environmental vibration to ISO office level, or better. |

## Heat Output

| Maximum Power Rating | Thermal Output |
|---|---|
| 80 Watts | 273 BTU/h |

## Noise Output

| Noise Output (dB) | Distance From Instrument |
|---|---|
| < 62 dB | 1 meter (3.3 feet) |

A measurement of < 62 dBA is within the level of a normal conversation at a distance of approximately 1 meter (3.3 feet).

## Host Network and Control Computer Guidelines

The iSeq 100 Sequencing System is designed for use with a network, regardless of whether runs are configured for BaseSpace Sequence Hub. The following operations require an external internet connection, even if BaseSpace Sequence Hub is not used:

▶ Automatically updating the control software.

▶ Uploading instrument performance data to Illumina.

▶ Configuring the output folder to reside on your network.

▶ Remote assistance from Illumina Technical Support.

The default network configuration is sufficient to transfer data and otherwise operate the system. If your organization has specific network requirements, consult your IT representative for help with advanced network settings. This section provides network guidelines *intended for IT representatives*.

## Data Transfer Considerations

A WiFi or Ethernet connection is sufficient to transfer data, but Ethernet provides a more reliable connection. Variable network strength and frequent WiFi interruptions can extend data transfer and delay subsequent runs. Until Universal Copy Service (UCS) completes data transfer for the previous run, a new run cannot be started.

> **NOTE**
>
> A WiFi interruption during data transfer does not cause data loss.

WiFi is turned off by default. To turn it on, see the *iSeq 100 Sequencing System Guide (document # 1000000036024)* for instructions.

## Storage Requirements for Data

BaseSpace Sequence Hub requires up to 900 MB of storage to accommodate data uploaded from a run. If data are stored locally, use the following approximate file sizes as a reference. These files are generated by a sequencing run and subsequent analysis.

| Output File Type | Approximate Size |
| --- | --- |
| BAM | 600 MB |
| BCL | 850 Mb |
| FASTQ | 850 MB |
| gVCF and VCF | < 10 MB |
| InterOp | 2.5 Mb |

## Network and Computer Security

The following sections provide guidelines for maintaining network and computer security.

▶ For configuration recommendations, see *Operating System Configuration* on page 13.

▶ For information on security updates, firewalls, and Remote Desktop Protocol (RDP), see the *Illumina Security Best Practices Guide (Pub No. 970-2016-016)*.

### Control Computer Security

The control computer combines Windows Software Restriction Policies (SRP) and user-supplied antivirus software for enhanced security. SRP increases the reliability, integrity, and manageability of computers in a domain. By restricting configurations, only identified applications can run.

If necessary, turn off or reconfigure SRP. For more information, see the *iSeq 100 Sequencing System Guide (document # 1000000036024)*.

### Antivirus Software

Install antivirus software of your choice to protect the instrument control computer from viruses. For detailed guidelines on maintaining system performance while safeguarding the control computer, see *Configuring Virus Scanner Software on Illumina Sequencers (Pub. No. 970-2010-006)*.

To avoid data loss or interruptions, configure the antivirus software as follows:

▶ Set antivirus software upgrades to download (but not install) without user authorization.

▶ Set for manual scans and perform the scans only when the instrument is not in use.
  ▶ Do not allow automatic scans.
  ▶ Disabling automatic scanning of packets sent and received over a TCP/IP link is important. Antivirus port scanning can interfere with internal system communication.

▶ Do not make updates during instrument operation.
  ▶ Make updates only when the instrument is not running and when it is safe to reboot the control computer.
  ▶ Do not reboot the computer automatically upon update.

▶ Exclude the application directory (**C:\Illumina**) and data directory (**D:\SequencingRuns**) from any real-time file system protection.

▶ Turn off Windows Defender. This product can affect the operating system resources used by Illumina software.

## Appropriate Use

The instrument control computer is designed to operate Illumina sequencing systems. For quality and security reasons, do not use it as a general-purpose computer. Web browsing, checking email, reviewing documents, and other unnecessary activity can degrade performance and cause data loss.

## Network Connections

Illumina does not install or provide technical support for network connections. Review network maintenance activities for potential compatibility risks with the iSeq 100 System.

Use the following guidelines to install and configure a network connection:

▶ Use a dedicated 1 gigabit connection between the instrument and data management system. Make this connection directly or through a network switch.

▶ The required bandwidth is 5 Mb/s/instrument for internal network uploads, BaseSpace Sequence Hub network uploads, and instrument operational data uploads.

▶ Switches and other network equipment must have a minimum connection speed of 1 gigabit per second. Total use on any switch must not exceed the rated speed.
  ▶ Calculate the total capacity of the workload on each network switch. The number of connected instruments and ancillary equipment, such as a printer, can impact capacity.
  ▶ If the instrument is operating in a complex network environment, use managed switches. For less complex environments with few devices on the network, managed switches are not necessary.

▶ Cables must be CAT-5e, or better. The shipping box contains a shielded CAT-5e network cable that is 3 meters (9.8 feet) long.

▶ If possible, isolate sequencing traffic from other network traffic.

▶ Configuring the iSeq 100 System for use with a proxy server depends on the unique setup of your network. For instructions, see the *iSeq 100 Sequencing System Guide (document # 1000000036024)*.

## Control Computer Connections

The control computer has two network interface connections. One is designed for external network communication. The other is designed for internal system communication only. *Do not disable the internal communication connection.*

The system acquires an IP address from the host network via Dynamic Host Configuration Protocol (DHCP) by default. Alternatively, you can choose a static address from Windows network settings.

## Outbound Connections

The following table provides the outbound network ports of the control computer. The MAC address, which provides network access for Ethernet and WiFi, is instrument-specific and cannot be provided before instrument shipment.

| Port | Purpose |
|------|---------|
| 80 | BaseSpace Sequence Hub, Local Run Manager, or Instrument Performance Data |
| 443 | BaseSpace Sequence Hub or Instrument Performance Data |
| 8080 | Software updates |

## BaseSpace Sequence Hub Domains

The following domains provide access from Universal Copy Service to BaseSpace Sequence Hub and Illumina Proactive. Some Enterprise addresses include a user-defined domain field. This custom field is reserved with {domain}.

| Instance | Address |
|----------|---------|
| US Enterprise | {domain}.basespace.illumina.com |
| | {domain}.api.basespace.illumina.com |
| | basespace-data-east.s3-external-1.amazonaws.com |
| | basespace-data-east.s3.amazonaws.com |
| | instruments.sh.basespace.illumina.com |
| EU Enterprise | {domain}.euc1.sh.basespace.illumina.com |
| | {domain}.api.euc1.sh.basespace.illumina.com |
| | euc1-prd-seq-hub-data-bucket.s3.eu-central-1.amazonaws.com |
| | instruments.sh.basespace.illumina.com |
| AUS Enterprise | {domain}.aps2.sh.basespace.illumina.com |
| | {domain}.api.aps2.sh.basepace.illumina.com |
| | instruments.sh.basespace.illumina.com |
| | aps2-sh-prd-seq-hub-data-bucket.s3.ap-southeast-2.amazonaws.com |
| US Basic and Professional | basespace.illumina.com |
| | api.basespace.illumina.com |
| | basespace-data-east.s3-external-1.amazonaws.com |
| | basespace-data-east.s3.amazonaws.com |
| | instruments.sh.basespace.illumina.com |
| EU Basic and Professional | euc1.sh.basespace.illumina.com |
| | api.euc1.sh.basespace.illumina.com |
| | euc1-prd-seq-hub-data-bucket.s3.eu-central-1.amazonaws.com |
| | instruments.sh.basespace.illumina.com |

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| Instance | Address |
|---|---|
| AUS Basic and Professional | aps2.sh.basespace.illumina.com |
| | api.aps2.sh.basepace.illumina.com |
| | instruments.sh.basespace.illumina.com |
| | aps2-sh-prd-seq-hub-data-bucket.s3.ap-southeast-2.amazonaws.com |
| GC Basic and Professional | cnn1.sh.basespace.illumina.com.cn |
| | api.cnn1.sh.basespace.illumina.com.cn |
| | instruments.sh.basespace.illumina.com.cn |
| | cn-sh-cnn1-prod-seq-hub-data-bucket.s3.cn-north-1.amazonaws.com.cn |

## Operating System Configuration

Before shipping, Illumina systems are tested and verified to operate within specifications. Changing settings after installation can introduce performance or security risks.

The following recommendations mitigate performance and security risks for the operating system:

▶ Create passwords that are at least 10 characters long and comply with local policies. *Keep a record of the password.*

    ▶ Illumina does not keep customer logon credentials, and unknown passwords cannot be reset.

    ▶ An unknown password requires restoring the system to factory defaults. This restoration removes all data from the system and creates downtime.

▶ Use the administrator account only for applying system updates and other use by IT staff. For all other functions, use the user account.

▶ If the system software operates incorrectly, consult your IT administrator about possible Group Policy Object (GPO) interference. When connecting to a domain to a GPO, some settings can affect the operating system or instrument software.

▶ Turn off RDP and use the Windows firewall or a network firewall (hardware or software).

▶ Turn off Windows Automatic Update.

### Windows Updates

To control configuration and operation of the control computer and deliver a more robust operating environment, the default Windows operating system has Windows Update turned off. System updates are not supported because they can put the operating environment at risk.

Alternatives to turning on Windows Update include:

▶ More robust firewalling and network isolation (virtual LAN).

▶ Network isolation of network attached storage (NAS), which allows data to sync to the network.

▶ Local USB storage.

▶ Avoiding improper use of the control computer and ensuring the appropriate permission-based controls.

### Third-Party Software

Illumina supports only the software provided at installation.

Chrome, Java, Box, and other third-party software are untested and can interfere with performance and security. For example, RoboCopy interrupts streaming performed by the control software suite. The interruption can cause corrupt and missing sequencing data.

## User-Supplied Consumables and Equipment

The following user-supplied consumables and equipment are used with the instrument. For more information on these processes, see the *iSeq 100 Sequencing System Guide (document # 1000000036024)*.

## Consumables for Sequencing

| Consumable | Supplier | Purpose |
|---|---|---|
| Disposable gloves, powder-free | General lab supplier | General purpose. |
| iSeq 100 i1 Reagent | Illumina, catalog #:<br>• 20021533<br>• 20021534 (four-pack) | Provides the reagents and flow cell for a run. |
| Microtubes, 1.5 ml | Fisher Scientific, catalog # 14-222-158, or equivalent low-bind tubes | Diluting libraries to the loading concentration. |
| Paper towels | General lab supplier | Drying the cartridge after a water bath. |
| Pipette tips, 20 µl | General lab supplier | Diluting and loading libraries. |
| Pipette tips, 100 µl | General lab supplier | Diluting and loading libraries. |
| Resuspension Buffer (RSB) | Illumina, provided with library prep kits | Diluting libraries to the loading concentration. |
| [Optional] 10 mM Tris-HCl, pH 8.5 | General lab supplier | Substitute for RSB to dilute libraries to the loading concentration. |
| [Optional] PhiX Control v3 | Illumina, catalog # FC-110-3001 | Performing a PhiX-only run or spiking in a PhiX control. |

## Consumables for Maintenance and Troubleshooting

| Consumable | Supplier | Purpose |
|---|---|---|
| Bleach wipes, 10% | VWR, catalog # 16200-218, or equivalent | Decontaminating the instrument and cleaning work surfaces. |
| Disposable gloves, powder-free | General lab supplier | General purpose. |
| iSeq 100 Spare Drip Tray Pad[1] | Illumina, catalog # 20023927 | Lining the drip tray to absorb any leaked fluids. |
| iSeq 100 Spare Air Filter[1] | Illumina, catalog # 20023928 | Replacing the air filter every six months. |
| iSeq 100 System Test Kit[2] | Illumina, catalog # 20024141 | Performing a system check. |
| Isopropyl alcohol wipes, 70% | VWR, catalog # 95041-714, or equivalent | Cleaning the instrument and reusable test flow cell. |
| Lab tissue, low-lint | VWR, catalog # 21905-026, or equivalent | Drying the drip tray and reusable test flow cell. |
| Paper towels | General lab supplier | Drying fluid around the instrument. |
| [Optional] Bleach solution, 10% | VWR, catalog # 16003-740 (32 oz), 16003-742 (16 oz), or equivalent | Cleaning work surfaces after decontamination. |
| [Optional] Ethanol wipes, 70% | Fisher Scientific, catalog # 19-037-876, or equivalent | Substitute for isopropyl alcohol wipes to clean the instrument and reusable test flow cell. |

[1] The instrument ships with one installed and one spare. When not under warranty, replacements are user-supplied. Keep packaged until use.

[2] Replaces the reusable test components shipped with the instrument when they expire after 5 years or 36 uses.

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## Equipment

| Item | Source | Purpose |
| --- | --- | --- |
| Freezer, -25°C to -15°C | General lab supplier | Storing the cartridge. |
| Ice bucket | General lab supplier | Setting aside libraries. |
| Pipette, 10 µl | General lab supplier | Diluting libraries to the loading concentration. |
| Pipette, 20 µl | General lab supplier | Diluting libraries to the loading concentration. |
| Pipette, 100 µl | General lab supplier | Diluting libraries to the loading concentration. |
| Refrigerator, 2°C to 8°C | General lab supplier | Storing the flow cell. |
| [Optional] Keyboard | General lab supplier | Supplementing the onscreen keyboard. |
| [Optional] Mouse | General lab supplier | Supplementing the touch screen interface. |
| [Optional] Water bath | General lab supplier | Thawing the cartridge. |

# Revision History

| Document | Date | Description of Change |
|---|---|---|
| Document # 1000000035337 v06 | October 2019 | Added domains for AUS Enterprise, AUS Basic and Professional, and GC Basic and Professional.<br>Corrected supplier information for iSeq 100 i1 Reagent. |
| Document # 1000000035337 v05 | March 2019 | Updated software descriptions to iSeq Control Software v1.4, which removes the requirement to enter the UNC path to a network location when specifying the output folder location.<br>Combined maximum watts and maximum current specifications for the uninterruptible power supply into one maximum output power specification.<br>Merged proxy server information with network connections information. |
| Document # 1000000035337 v04 | August 2018 | Added information on proxy servers and mapped network drives.<br>Updated antivirus software recommendations to reference antivirus port scanning and *Configuring Virus Scanner Software on Illumina Sequencers (Pub. No. 970-2010-006)*.<br>Described the two network interface connections and indicated that the internal communication connection must not be disabled. |
| Document # 1000000035337 v03 | June 2018 | Updated tubes used for diluting libraries to Fisher Scientific catalog # 14-222-158 or equivalent low-bind tubes. |
| Document # 1000000035337 v02 | May 2018 | Updated Illumina catalog numbers for:<br>• iSeq Drip Tray Pad to 20023927<br>• iSeq System Air Filter to 20023928<br>Updated pipette and pipette tip recommendations.<br>Updated descriptions of shipping box contents to match labels.<br>Increased amount of reusable test cartridge and flow cell uses to 36.<br>Increased dimensions of cartridge packaging.<br>Noted that the flow cell is shipped at room temperature.<br>Noted that you can move the instrument after installation. |
| Document # 1000000035337 v01 | February 2018 | Added the following user-supplied consumables and equipment:<br>• Illumina, catalog # 20021533 for iSeq 100 i1 Reagents<br>• Illumina, catalog # 20021534 for iSeq 100 i1 Reagents (four-pack)<br>• Illumina, catalog # 20024143 for the iSeq 100 Drip Tray Pad<br>• Illumina, catalog # 20024142 for the iSeq 100 System Air Filter<br>• VWR, catalog # 16200-218 for 10% bleach wipes<br>• Fischer Scientific, catalog # 19-037-876 for 70% ethanol wipes<br>• General lab supplier for micropipettes, micropipette tips, and an optional water bath<br>Added information on first time setup and password changes.<br>Added storage conditions for reusable and spare components.<br>Added a storage requirement of ≤ 900 MB per run for BaseSpace Sequence Hub.<br>Added Local Run Manager to port 80 for outbound connections.<br>Added recommendation on appropriate use of the administrator and user accounts.<br>Indicated that lab benches must be level.<br>Clarified how the system acquires an IP address.<br>Clarified when to use managed switches.<br>Updated example uninterruptible power supply (UPS) models.<br>Updated the shipping box configuration:<br>• Added accessory box dimensions and weight.<br>• Corrected which documents ship with the instrument. |

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| Document | Date | Description of Change |
|---|---|---|
| Document # 1000000035337 v01 | February 2018 | Renamed the reagent kit to iSeq 100 i1 Reagent.<br>Renamed document # 1000000035963 to *iSeq 100 Sequencing System Setup Poster*.<br>Removed the recommendation to maintain administrative privileges for users.<br>Removed component dimensions for four-pack kits, which have the same dimensions as single-pack kits.<br>Removed the Enhanced Mitigation Experience Toolkit (EMET). |
| Document # 1000000035337 v00 | December 2017 | Initial release. |

# Technical Assistance

For technical assistance, contact Illumina Technical Support.

| | |
|---|---|
| **Website:** | www.illumina.com |
| **Email:** | techsupport@illumina.com |

## Illumina Customer Support Telephone Numbers

| Region | Toll Free | Regional |
|---|---|---|
| North America | +1.800.809.4566 | |
| Australia | +1.800.775.688 | |
| Austria | +43 800006249 | +43 19286540 |
| Belgium | +32 80077160 | +32 34002973 |
| China | 400.066.5835 | |
| Denmark | +45 80820183 | +45 89871156 |
| Finland | +358 800918363 | +358 974790110 |
| France | +33 805102193 | +33 170770446 |
| Germany | +49 8001014940 | +49 8938035677 |
| Hong Kong | 800960230 | |
| Ireland | +353 1800936608 | +353 016950506 |
| Italy | +39 800985513 | +39 236003759 |
| Japan | 0800.111.5011 | |
| Netherlands | +31 8000222493 | +31 207132960 |
| New Zealand | 0800.451.650 | |
| Norway | +47 800 16836 | +47 21939693 |
| Singapore | +1.800.579.2745 | |
| Spain | +34 911899417 | +34 800300143 |
| Sweden | +46 850619671 | +46 200883979 |
| Switzerland | +41 565800000 | +41 800200442 |
| Taiwan | 00806651752 | |
| United Kingdom | +44 8000126019 | +44 2073057197 |
| Other countries | +44.1799.534000 | |

**Safety data sheets (SDSs)**—Available on the Illumina website at support.illumina.com/sds.html.

**Product documentation**—Available for download in PDF from the Illumina website. Go to support.illumina.com, select a product, then select **Documentation & Literature**.

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