Oxford NANOPORE Technologies PromethION 24 Combined High-Throughput High-Sample Number Benchtop System User Guide

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Oxford NANOPORE Technologies PromethION 24 Combined High-Throughput High-Sample Number Benchtop System

Product Information

Specifications

- **Product Name:** PromethION 24 Combined
- **Manufacturer:** Oxford Nanopore Technologies
- **Model:** PromethION 24 Combined
- **Website:** community.nanoporetech.com/to/promethion
- **Support:** community.nanoporetech.com/to/safety

Product Usage Instructions

Powering On the Device

1. Turn on the power at the mains socket (if present) and toggle the power switch at the rear of the Sequencing Unit.
2. Wait for 3 minutes.
3. Turn on the mains power switch (if present) and press the power button on the Data Acquisition Unit.
4. The boot screen will appear on the monitor.

Logging In

1. Log in to your PromethION using the password: prom.
2. Open MinKNOW by clicking the wheel icon on the desktop and log in using your Nanopore Community account.

Checking for Updates

The latest MinKNOW software updates are essential for optimal function. Follow the steps below:

1. New software updates will be displayed automatically when opening MinKNOW.
2. To manually check and install updates, navigate to Host settings in the side bar, then Software, and finally Install update in the MinKNOW panel.

Performing Hardware Check

Before initiating your first sequencing run, perform a hardware check following steps:

1. Insert the CTCs as indicated.
2. In MinKNOW, click on the PromethION symbol, then Start in the left side panel.
3. Select Hardware check.
4. Click the white boxes under the PromethION positions panel.
5. Initiate the check by clicking Start in MinKNOW software.
6. Ensure each flow cell position displays a green tick box to pass the hardware check.
7. Remove the CTCs upon completion of the check.

Powering Down the Device

1. Ensure no experiments are running and remove all flow cells or CTCs.
2. In the sidebar, select Host settings, then click the Shutdown button in the main window.
3. Confirm shutdown in the pop-up box.
4. Only turn off the Sequencing Unit using the power switch.

FAQ

- **Q:** What should I do if my hardware check fails?
- **A:** If your hardware check fails, refer to the Support section in Additional Information or consult the user manual available at **community.nanoporetech.com/to/promethion** for further assistance.

STOP!

An Oxford Nanopore Technologies Engineer will unpack and install your device. You should not unpack or install your PromethION™ 24 Combined.
This Quick Start guide will tell you everything you need to do to check your hardware before you start sequencing following your device installation by an Oxford Nanopore Technologies Engineer.
Before using the device, familiarise yourself with the following:

PromethION 24 Combined user manual
community.nanoporetech.com/to/promethion

Safety and regulatory information
community.nanoporetech.com/to/safety

For detailed information and troubleshooting, view the user manual.

Power on your PromethION 24 Combined

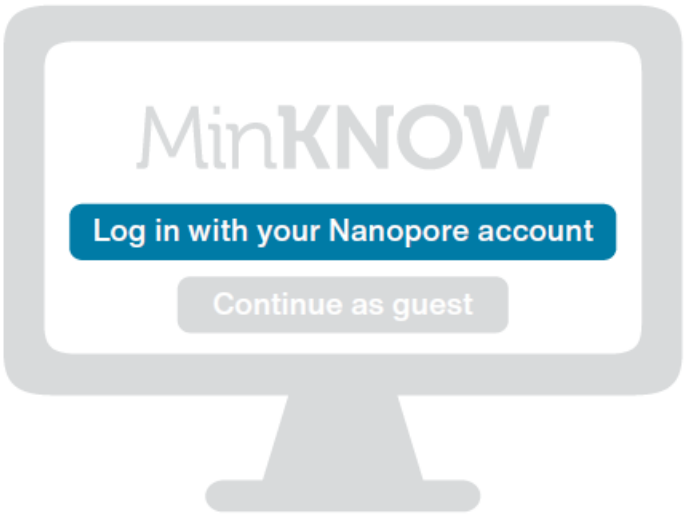
Important: Power on your device precisely following the steps below. Refer to the device diagram on page 6 of this Quick Start guide to help locate the power switches on the device units.

1. Turn on the power at the mains socket (if present) and then toggle the power switch at the rear of the Sequencing Unit.
2. Wait 3 minutes.
3. Turn the mains power switch on (if present) and press the power button on the top of the Data Acquisition Unit.

The boot screen will appear on the monitor.

Log in to your device

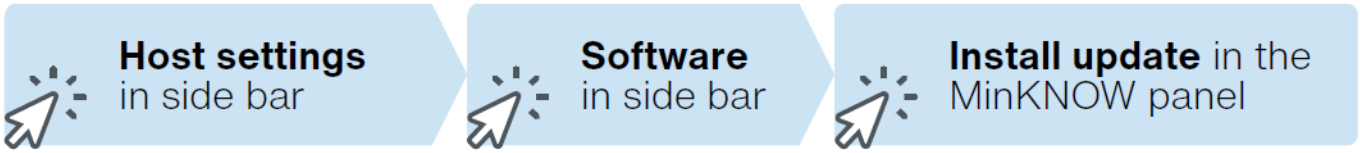
1. Log in to your PromethION Password: prom
2. Open MinKNOW™ Click the wheel icon on the desktop and log in using your Nanopore Community account.



Tip: View the pop-up tutorials to learn how to navigate the user interface.

Check for updates

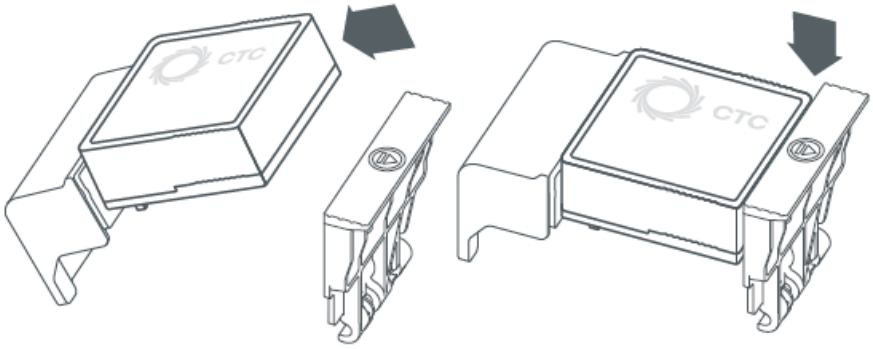
- The latest MinKNOW is needed for optimal function and the most recent software features.
- New software updates will be displayed automatically when opening MinKNOW.
- You can also manually check and install updates following the workflow below.



Perform hardware check

A hardware check is needed before performing your first sequencing run. You will require your CTC and must follow the instructions below to do a hardware check.

1. Insert the CTCs as shown right.
2. Click on the PromethION symbol, then click Start in the left side panel.



3. Click Hardware check.
4. Click the white boxes under the PromethION positions panel.
5. Click Start in the bottom right corner of the software in MinKNOW.
6. Check that each flow cell position shows a (green tick box) to pass the hardware check.
7. Remove the CTCs after the check is complete.

Note: See Support in Additional information if your hardware check fails.
Refer to the user manual for more information community.nanoporetech.com/to/promethion.

Power down the device

Your PromethION must be shut down according to the steps below to prevent potential device errors.
Please place the Powering on and off your PromethION 24 Combined flyer that accompanies this Quick Start guide next to your PromethION device to support other users.

1. Ensure that no experiments are running and remove all flow cells or CTCs.
2. Select Host settings in the sidebar, then click the Shutdown button in the main window. Confirm shutdown in the pop-up box.
3. **Important:** Only turn off the Sequencing Unit (using the power switch on the back of the device) once the Data Acquisition Unit has fully shut down.
4. Turn off both devices at the main power supply.

Discover the Nanopore Community

community.nanoporetech.com

- Ensure the success of your nanopore sequencing project and stay up-to-date with the latest technology and protocol updates.
- Use the web browser on your PromethION to navigate to the Nanopore Community.

Additional information

Warranty

- A license and warranty can be purchased for your device here: store.nanoporetech.com/device-warranty.html. Flow cell warranty: community.nanoporetech.com/to/warranty.

Recycle used flow cells

- Oxford Nanopore is committed to environmental sustainability.
- You can help by sending your flow cells for recycling.
- Find out how: community.nanoporetech.com/support/returns.

Place your next order

-  Buy more consumables at the Oxford Nanopore Store: **store.nanoporetech.com**.

Documentation

-  Documentation for your device is available on the Nanopore Community: **community.nanoporetech.com/docs**.

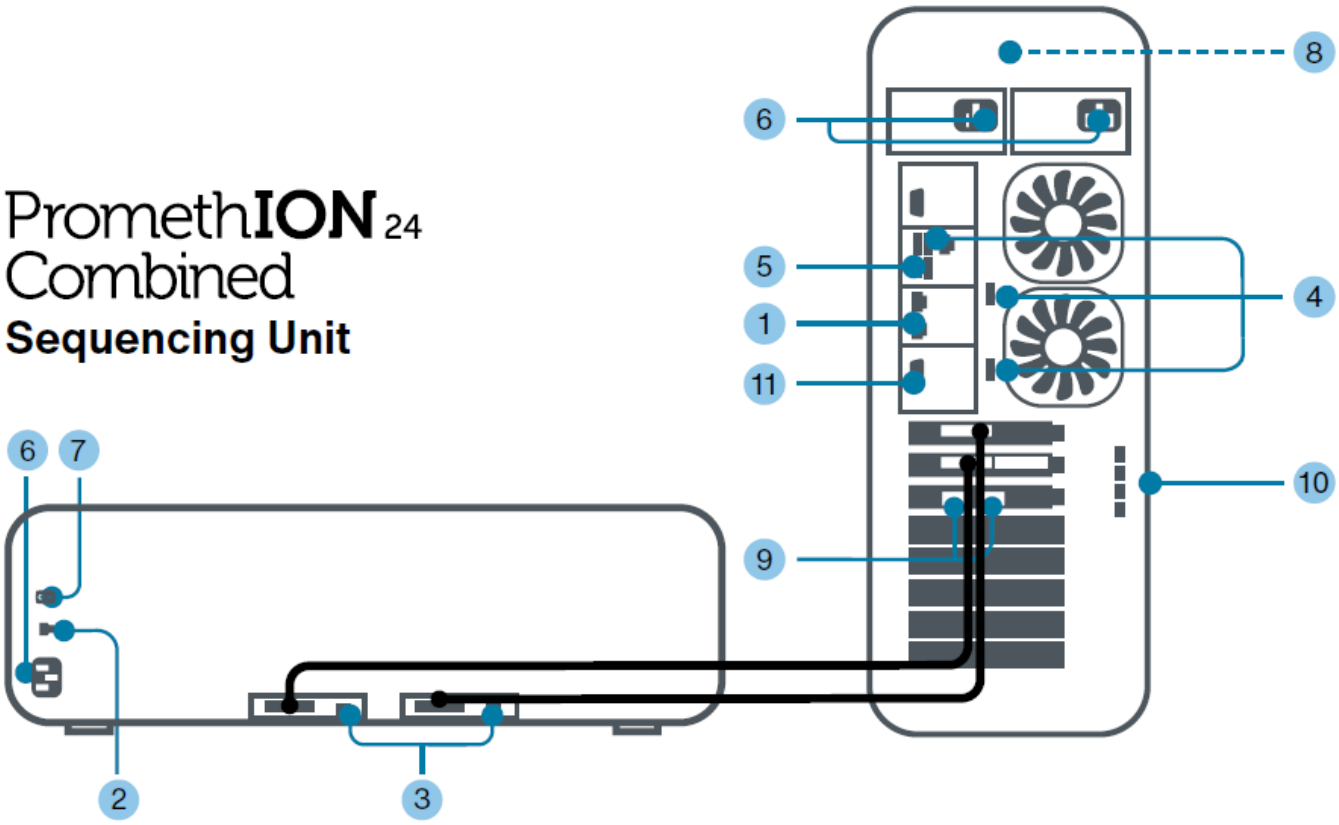
Support

-  For all of your customer and technical support needs, visit: **nanoporetech.com/support** or contact s**upport@nanoporetech.com**.

PromethION 24 Combined

PrometheION 24
Combined
Combined Data Acquisition Unit

PrometheION 24
Combined
Sequencing Unit



Device connections

1. 10G Ethernet ports
2. USB-B port
3. USB-Mini ports
4. USB-A ports
5. USB-C port
6. Power sockets
7. Power on/off – Sequencing Unit
8. Power on/off – Data Acquisition Unit
9. Fibre module cages
10. Mini DisplayPort
11. VGA port

Technical specification

	PromethION 24 Combined	
Model number	PRO-CMB024	
Device units	Sequencing Unit	Data Acquisition Unit
Supply voltage (V)	100-240 AC ± 10% (50/60 Hz)	220-240 AC ± 10% (50/60 Hz)
Maximum rated current (A)	12	12-11 A (220-240 VAC)
Maximum rated power (W)	1200	2200
Peak power performance consumption (W)	1200	2450
Size (H x W x D) (mm)	190 x 590 x 430	470 x 178 x 440
Weight (kg)	28	26
Installation ports	1 x Power socket 2 x USB mini-B port 1 x USB Type-B port	2 x 2.2kW Power sockets 4 x Mini DisplayPorts 5 x USB Type-A 1 x USB Type C 2 x 10G Ethernet Port 2 x Fibre Optic Ports 1 x VGA port
Software installed	Ubuntu, MinKNOW	
Computer specification	2 x Intel 40-core CPU, 4 x NVIDIA Ampere-architecture GPU, 60 TB SSD Storage, 512 GB Memory	
Environmental conditions	Functional range of electronics is within environmental temperatures of +5°C to +40°C Use within 30%-75% relative non-condensing humidity limits Designed to sequence in environmental temperatures of +18°C to +22°C Users should allow 30 cm clearance to the rear and sides of the device WARNING: The rear of the instrument heats up during operation WARNING: Heavy equipment. Two-person lifting is required for the device. Combined weight over 50 kg Intended for indoor use Can be used up to altitudes of 2,000 m The is a Pollution Degree 2 device This is an Overvoltage 2 device 1.67 x 0.77 m minimum bench space required for suitable spacing and placement.	

CONTACT

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Documents / Resources

	Oxford NANOPORE Technologies PromethION 24 Combined High-Throughput High-Sample Number Benchtop System [pdf] User Guide PromethION 24 Combined High-Throughput High-Sample Number Benchtop System, Combined High-Throughput High-Sample Number Benchtop System, Throughput High-Sample Number Benchtop System, High-Sample Number Benchtop System, Number Benchtop System, Benchtop System

References

- Oxford Nanopore Support | Oxford Nanopore Technologies
- community.nanoporetech.com/docs
- nanoporetech-customers - Sign In
- Community
- Community
- Oxford Nanopore Support | Oxford Nanopore Technologies
- store.nanoporetech.com
- store.nanoporetech.com/device-warranty.html
- Welcome to Oxford Nanopore Technologies
- User Manual