



Olink[®] Signature Q100

Installation Procedure

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1. Introduction

1.1 About This Guide and Target Group

This document describes how to unpack and install the Olink® Signature Q100 instrument at the customer's site. If assistance for lifting, installation qualification (IQ) or operational qualification (OQ) is needed, please contact our support: support@olink.com.

2. Safety

2.1 Instrument Safety

The system should be serviced by authorized personnel only.

For complete instrument safety information, including a full list of the symbols on the instrument, refer to the Olink® Signature Q100 User Manual (1172).



WARNING: PHYSICAL INJURY HAZARD. Do not attempt to lift or move the instrument unless you use proper lifting techniques. The instrument weighs approximately 41.5 kg (91.5 lb). If you choose to lift or move the instrument after it has been installed, do not attempt to do so without the assistance of others. Use appropriate moving equipment and proper lifting techniques to minimize the chance of physical injury.



WARNING: Do not tilt or tip the Olink® Signature Q100 system as it may damage the hardware and electronics of the instrument.



WARNING: Do not remove the enclosure or modify this instrument or system. Unauthorized modifications may create a safety hazard.



CAUTION: HOT SURFACE HAZARD. The thermal cyler chuck gets hot and can burn your skin. Use caution when working near the chuck.

2.2 Electrical Safety



NOTE: The mains power supply is connected on the rear panel of the instrument.



ELECTRICAL HAZARD: Plug the system into a properly grounded receptacle with adequate current capacity.



WARNING: DO NOT REMOVE THE COVERS without unplugging the instrument.

2.3 Chemical Safety

The responsible individuals must take the necessary precautions to ensure that the surrounding workplace is safe and that the system operator is not exposed to hazardous levels of toxic substances. When working with any chemicals, refer to the manufacturer or supplier's applicable safety data sheets (SDSs).

3. Installation

3.1 Workflow

1	2	3	4	5	6
Pre-requisite	Delivery and System Inspection	Uncrate the Instrument	Disengage the Shipping Lock	Connect the power cable.	Installation and Configuration

3.1.1 Pre-requisite

The Olink Signature Q100 instrument is equipped with pneumatic and thermal stack that can prepare, load, and perform PCR using microfluidic chips. It is also equipped with an optical system to read fluorescence using a 2-color wavelength filter system.

Proper installation of the instrument is essential to ensure optimal performance of the instrument.

The customer is responsible for the site to be compliant with site preparation and requirements as described in the Olink® Signature Q100 Site Requirements Guide (1170) before the instrument is installed.

3.1.2 Tools and Equipment

Included

- Olink Signature Q100 Instrument
Items included with the instrument:
 - Power cable
 - Interface plate 96.96
 - Interface plate 48.48
 - 4 mm Hex T Handle

Not included


- Scissors or box cutters to cut packaging straps

3.2 Delivery and System Inspection

Use this checklist to perform a check of all delivered components:

- Check the packing list against the original order.
- Check all boxes and crates for damage.
- Note any damage and report it to the Olink service representative.
- Locate the reagent kit (if ordered) and unpack it immediately.
- Store each component at the appropriate temperature according to the instructions.

3.2.1 Components Included in the Shipping Box

Component	Purpose
Olink Signature Q100 instrument	Prepares, loads, and thermal-cycles the IFC and collects real-time and endpoint data.
Power cable	<p>A country-specific power cable to connect the Olink Signature Q100 instrument to the wall socket.</p> <p> The instrument has a connection to protective earth through the power cord provided by Olink. Ensure that the electrical receptacle provides an earth ground before connecting the power cord. Use only power cords supplied by Olink or power cords that meet the minimum ratings of 250 V/8 A, 18 AWG, and have a length not exceeding 2.5 meters.</p>
Olink®Signature Q100 Interface Plate kits	<p>The Olink Signature Q100 Interface Plates are specific to the type of integrated fluidic circuit (IFC, also referred to as a chip) you are using. Store interface plates in the storage container when not in use.</p> <ul style="list-style-type: none">• 96.96 Interface Plate. This interface plate (96010) is included with the system and allows you to use the Olink 96.96 IFC for Protein Expression with Olink Signature Q100.• 48.48 Interface Plate. This interface plate (96011) is included with the system and allows you to use the Olink 48.48 IFC for Protein Expression with Olink Signature Q100. <p>NOTE: <i>The 24.192 Interface Plate (96012, for the Olink 24.192 IFC for Protein Expression) can be purchased separately from Olink.</i></p>
4mm Hex T Handle	The Hex T Handle is used to disengage the shipping lock prior to powering on the instrument.

3.3 Uncrate the Instrument



WARNING: PHYSICAL INJURY HAZARD. Do not attempt to lift or move the instrument unless you use proper lifting techniques. The instrument weighs approximately 41.5 kg (91.5 lb). If you choose to lift or move the instrument after it has been installed, do not attempt to do so without the assistance of others. Use appropriate moving equipment and proper lifting techniques to minimize the chance of physical injury.



NOTE: We recommend retaining all of the instrument packaging materials in case the system requires transport or shipment at a later date. The system's packaging is designed to protect the instrument during shipment when routine handling and transport instructions are followed.



NOTE: Always contact an Olink representative before moving the instrument. Failure to do so may invalidate the warranty.

1. Cut the shipping straps and lift the box to expose the instrument.



Figure 1. Shipping straps



Figure 2. Lift box

2. Remove the top foam covering to access the instrument accessories underneath. Remove the included power cord, the interface plates (96.96 and 48.48) and the T Handle, and have them accessible for later steps.



Figure 3. Power cord, interface plates and T Handle are found in the top foam cover.

3. Lift and remove the foam enclosure to reveal the instrument.



Figure 4. Instrument with plastic wrapping

4. With the assistance of at least one more person, lift the instrument by the rear handle and the pocket underneath the bottom front of the instrument. Place the instrument onto the workbench.



Figure 5. Rear handle



Figure 6. Front pocket for lifting

5. Remove the plastic wrapping around the instrument and peel away the protective plastic cover on the glass panel.



Figure 7. Remove plastic wrapping



Figure 8. Glass panel plastic cover

 **NOTE:** Remove all plastic before lifting the instrument if found easier.

3.4 Disengage the Shipping Lock

1. Locate the Shipping Lock Access point, labeled with a padlock and arrow:



Figure 9. Shipping Lock Access Point

2. Insert the included T Handle into the access point.



Figure 10. T Handle Inserted into access point

3. Rotate the T handle counter-clockwise to a hard stop to unlock the instrument for use. It takes 7 to 10 full rotations to unlock:

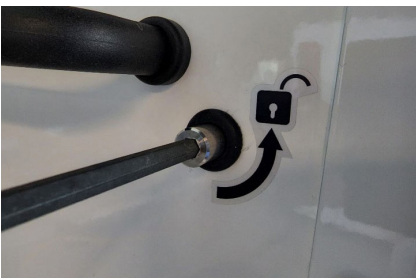


Figure 11. Rotate T handle counter-clockwise to unlock instrument

4. Place T Handle in T Handle Holder.



Figure 12. T Handle in holder

3.5 Connect the Ethernet Cable (Optional)

Connect the instrument to your network by using an ethernet cable to utilize networking features such as:

- Using domain authentication for instrument users
- Importing data directly from the instrument using the NPX Signature software.

For more information on how to securely connect the Signature Q100 to a network, refer to Olink® Signature Q100 User Manual (1172) and Olink® NPX Signature User Manual (1173).

3.6 Installation and Configuration

1. Attach the power cord at the rear panel of the instrument and connect to an electrical outlet. The instrument is ready to be powered on by toggling on the power switch located above the power cord.



ELECTRICAL HAZARD: Plug the system into a properly grounded receptacle with adequate current capacity.

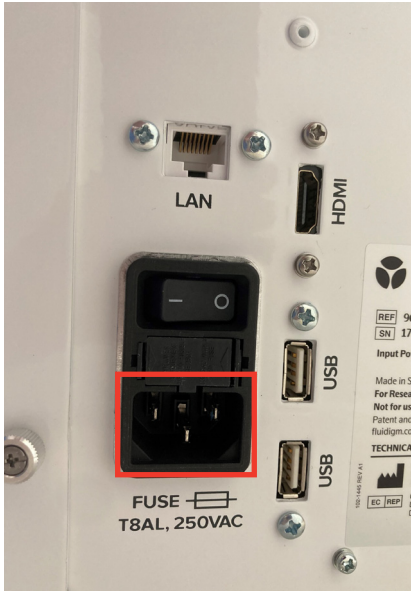


Figure 13. Power cord connection



Figure 14. Instrument power switch toggled on

2. The instrument initialization begins.

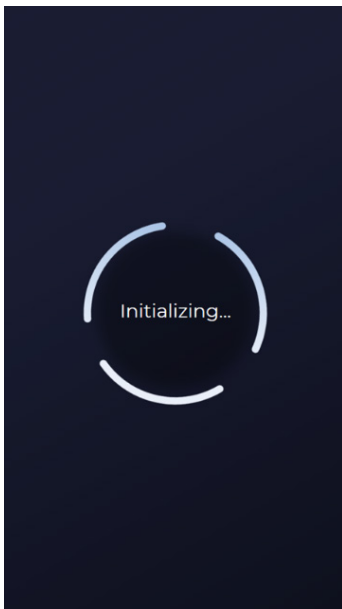


Figure 15. Instrument initializing

3. After the system starts up, the screen prompts you to begin by tapping **Next**.

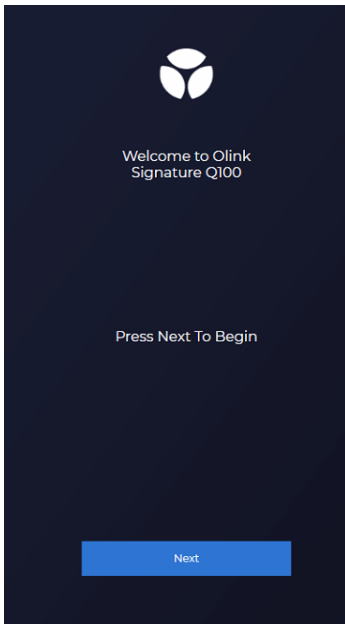


Figure 16. Welcome screen

4. To perform the installation: Follow the instructions on the touch screen.
5. Set the time zone by scrolling to and selecting the desired time zone setting. Confirm the selection by tapping **OK**. Tap **Next**.



Figure 17. Set Timezone

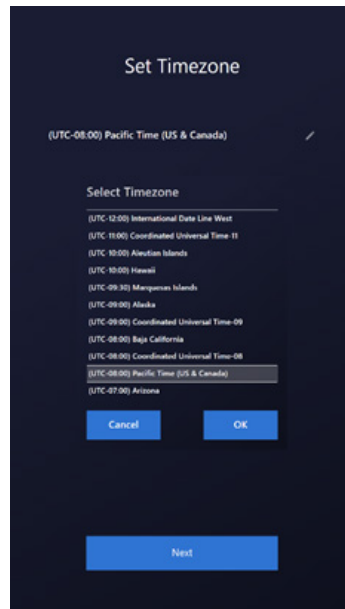


Figure 18. Select Timezone

- Set the time and date by scrolling to the correct values. Tap **Next**.

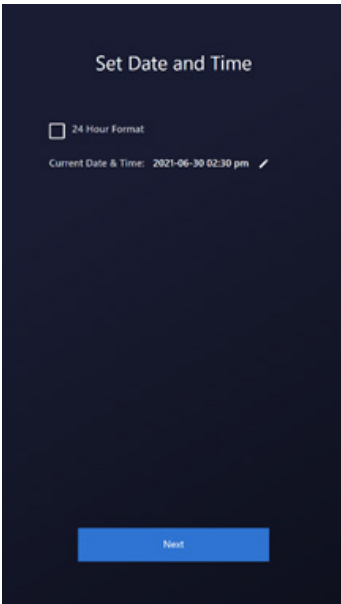


Figure 19. Set Date and Time

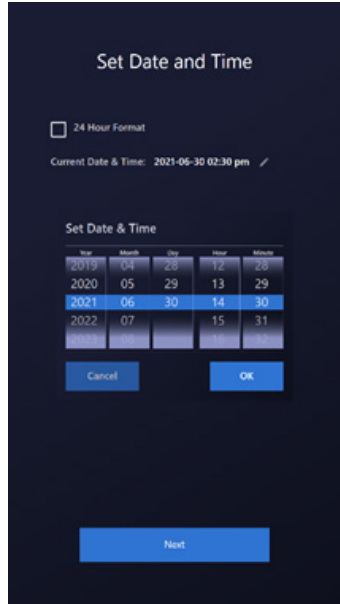


Figure 20. Select Date and Time

- Set the Authentication and Domain for IT directory identification. Uncheck the Require Authentication checkbox to proceed without authentication. Tap **Next**.

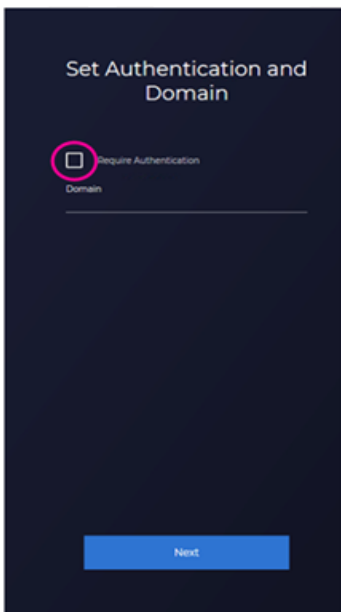


Figure 21. Set Authentication and Domain

8. Follow the prompts to remove the shuttle compartment packing material and tape.



Figure 22. Shuttle packing material removal

 **NOTE:** Store the shuttle packing materials with the rest of the instrument packaging.

9. Remove the tape across the lid, and open the shuttle door by pulling down on the plastic tab. Remove the shuttle compartment packing material.

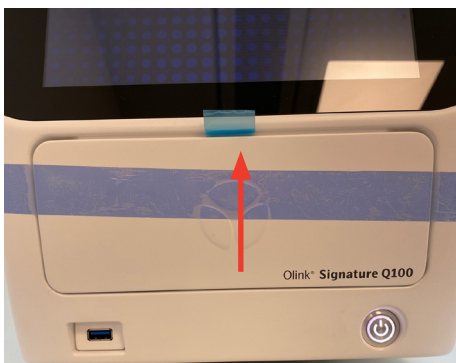


Figure 23. Remove the tape over the lid



Figure 24. Shuttle compartment packing material

10. Press **Eject** on the screen to extend the shuttle and then remove the blue tape securing the thermal stack.



Figure 25. Eject button

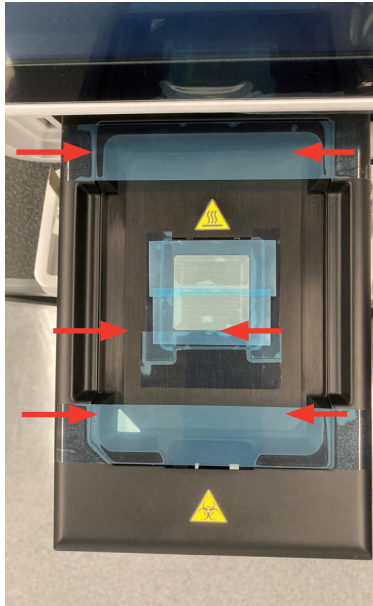



Figure 26. Shuttle packing tape

11. Press **Next** to retract the shuttle. The Testing System screen appears, and the Installation Instrument Check runs for ~10 minutes. Upon completion of testing the system, the **Installation Checklist** appears. Verify all items in the checklist and check all the boxes to confirm essential instrument condition and functionality.

 **NOTE:** If self-diagnostics fails, re-run a second time. If the self-diagnostics fails again, please contact Olink support.

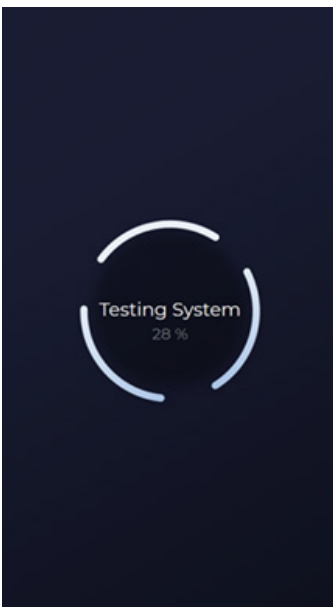


Figure 27. Testing System

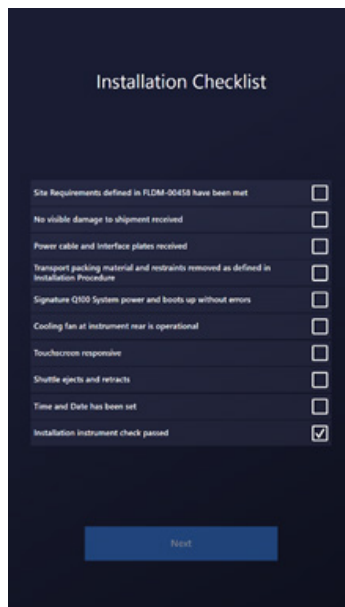


Figure 28. Installation Checklist

The installation checklist consists of the following checkpoints:

- Site Requirements defined in document Olink® Signature Q100 Site Requirements (1170) have been met
- No visible damage to shipment received

- Power cable and 96.96 Interface plate received
- Transport packing material and restraints removed as defined in Installation Procedure
- Olink Signature Q100 System power and boots up without errors
- Cooling fans at the instruments' rear are operational
- Touchscreen responsive
- Shuttle ejects and retracts
- Time and Date has been set
- Installation Instrument Check Passed



Figure 29. Installation Instrument Check Passed

 **NOTE:** If the Installation Instrument Check fails, a notification appears. Contact Olink for tech support.

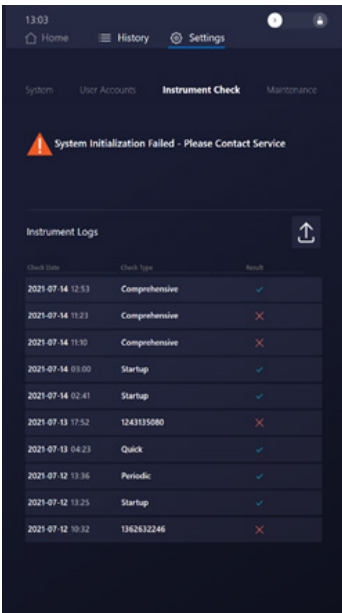


Figure 30. Initialization Failed Notification

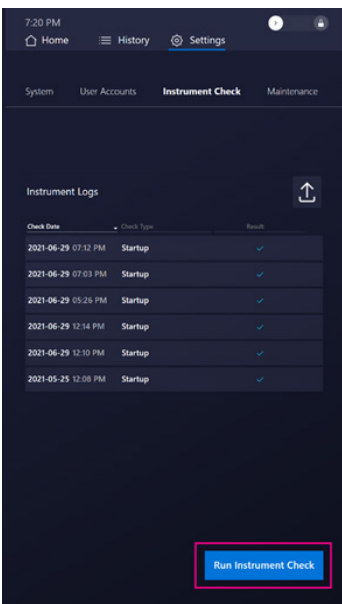


Figure 31. Run Instrument Check

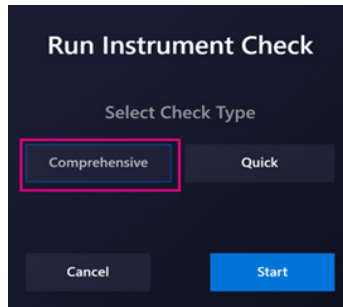


Figure 32. Run Instrument Check

12. The **Swipe to Unlock** screen appears. After swiping, the **Start a new run** screen appears, and the instrument is ready to be used.

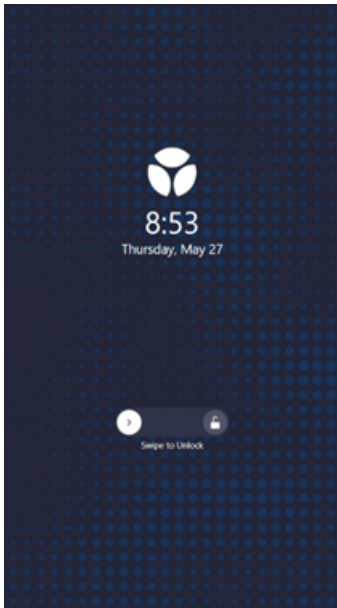


Figure 33. Swipe to Unlock

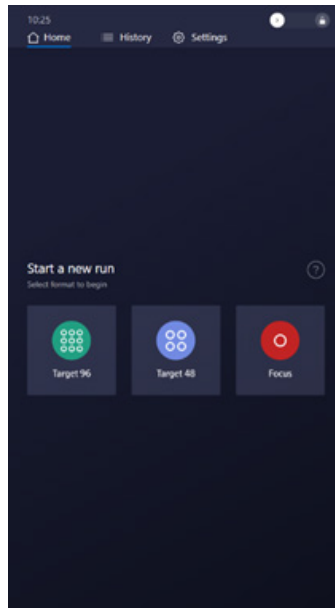


Figure 34. Start a new run

 **NOTE:** To perform a Focus run, you need the 24.192 Interface Plate. This interface plate can be purchased separately from Olink.

4. Revision history

Version	Date	Description
1.2	2022-12-09	Updated 2.1 warnings and cautions. Changed instructions in Section 3.4 to reflect revision to shipping lock. Added new footer. Editorial changes.
1.1	2022-01-25	Changed reference information in section 3.5 Revision history added Editorial changes
1.0	2021-11-10	New

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