Agilent CrossLab
From Insight to Outcome

Agilent CrossLab Start Up Services

Agilent Lionheart FXW/LXW Site Preparation Checklist

Thank you for purchasing an instrument from **Agilent Technologies.** CrossLab Start Up is focused on helping customers shorten the time it takes to start realizing the full value of their instrument investment.

Correct site preparation is the key first step in ensuring that your instruments and software systems operate reliably over an extended lifetime. This document is an **information guide and checklist** prepared for you that outlines the supplies, space, and utility requirements for the system set up in your lab.

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Agilent

Introduction

Customer Information

- If you have questions or problems in providing anything described as part of *Customer Responsibilities* below, please contact your local Agilent or partner support/service organization for assistance prior to delivery.
- Should your site not be ready, please contact Agilent as soon as possible to re-schedule any services that have been purchased.
- Other optional services such as additional training, operational qualification (OQ) and consultation for user-specific applications may ordered with the system but should be contracted separately.
- Installation of the Lionheart FXW/LXW may involve multiple parties. The installation and training are to be scheduled with your Field Applications Scientist or, in case of additional services such as operational qualification, contact Agilent CrossLab.

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Customer Responsibilities

Ensure that your site meets the following specifications before the installation date.

- Please communicate your site's PPE rules to the visiting Agilent representative before the day of the visit.
- For gas controller accessories, provide access to laboratory gases (CO_2, N_2) and appropriate tubing, connections, and regulators. We recommend that you connect with your facilities team to ensure that institutional laboratory gas safety protocols are met.
- Ensure there are at least four (4) emergency-protected electrical outlets close to your installation location. It is acceptable to use a power strip or uninterrupted power supply.
- Provide the **required operating supplies** necessary for the product and installation. See section Required Operating Supplies (Customer Provided) for details.
- Ensure IT readiness for computer setup, including internet connectivity for the imaging controller. If this is not feasible, please connect with your Agilent contact.
- While Agilent is delivering **Installation and Introduction** services, users of the instrument should be present throughout these services; otherwise, they will miss important operational, maintenance, and safety information.
- Please consult the **Special Requirements and Other Considerations** section below for other product-specific information.
- Technical Support e-mail is bio.tac@agilent.com.

Important Customer Web Links

- To access Agilent training and education, visit http://www.agilent.com/chem/training to learn about training options, which include online, classroom and onsite delivery. A training specialist can work directly with you to help determine your best options.
- To access the **Agilent Resource Center** web page, visit https://www.agilent.com/en-us/agilentresources. The following information topics are available:
    - Sample Prep and Containment
    - Chemical Standards
    - Analysis
    - Service and Support
    - Application Workflows
- The **Agilent Community** is an excellent place to get answers, collaborate with others about applications and Agilent products, and find in-depth documents and videos relevant to Agilent technologies. Visit https://community.agilent.com/welcome
- Videos about specific preparation requirements for your instrument can be found by searching the **Agilent YouTube** channel at https://www.youtube.com/user/agilent
- **Need to place a service call?** Flexible Repair Options | Agilent
- Technical support email is: bio.tac@agilent.com

Site Preparation

Dimensions and Weight

Identify the laboratory bench space before your system arrives based on the table below. Pay special attention to the total height and total weight requirements for all system components you have ordered and avoid bench space with overhanging shelves.

Also pay special attention to the total weight of the modules you have ordered to ensure your laboratory bench can support this weight.

Special notes

The following table provides dimensions and weight requirements.

- This product requires additional lifting assistance in order to be located in your lab due to its weight. Please discuss the arrangements for this activity with the service engineer prior to installation.

Instrument Description	Weight		Height		Depth		Width	
	Kg	lbs.	cm	in	cm	in	cm	in
Lionheart FXW/LXW Automated Microscope	26.3	58	35.8	14.1	45.47	17.9	46.48	18.3
Controller	10.2	22.4	44.5	17.5	38.6	15.2	16.9	6.7
Monitor (with stand)	4.7	10.4	53.9	21.2	16.5	6.5	34.8	13.7

Equipment Positioning on the Bench

- The Lionheart without Lid requires bench space with the following approximate dimensions: 20” (51cm) height, 32” (81 cm) depth, and 30” (76 cm) width.
- The Lionheart with Lid requires bench space with the following approximate dimensions: 33” (84 cm) height, 32” (81 cm) depth, and 30” (76 cm) width.
- The rear and sides of the instrument will need at least 6 inches (15 cm) of free space for cooling airflow and power cord routing.
- The front of the instrument will need at least 8 inches (20cm) of clear space for objective and LED/Filter cube access.

Environmental Conditions

Operating your instrument within the recommended temperature ranges ensures optimum instrument performance and lifetime.

Special notes

- Performance can be affected by sources of heat and cold, e.g., direct sunlight, heating/cooling from air conditioning outlets, drafts and/or vibrations.
- To ensure optimal image quality, it is particularly important that your Lionheart not be placed in a location near centrifuges, freezers, or other sources of vibration.
- The following table may help you calculate the additional BTUs of heat dissipation from this new equipment. Maximums represent the heat given off when heated zones are set for maximum temperatures.

Instrument Description	**BTU Heat Dissipation**	
Lionheart and Controller	863 BTU/HR	If the instrument is to be enclosed, the container must have an exhaust and temperature control to dissipate the heat generated by the instrument.
Instrument Description	**Operating Temperature Range °C (F)**	**Operating Humidity Range %**
Lionheart and Controller	18°C (64°F) – 30°C (86°F)	10-85% non-condensing

Exhaust Venting Requirements

The instrument has a fan to cool internal electronics. If this is blocked or the ambient environment temperature is raised, it could affect the operation of the instrument.

Power Consumption

Special notes

- The instrument will need four (4) outlets to source power to the instrument, as outlined below
- It is important that the outlets used are provided uninterrupted power so that extended kinetic experiments are not interrupted. Contact your institution's facilities team if you are concerned about whether your chosen outlets are sufficient.

Instrument Description	Line Voltage and Frequency V, Hz	Maximum Power Consumption VA	Maximum Power Consumption W
Lionheart	100VAC – 240VAC 50Hz -60Hz	250 VA maximum	250 W maximum
Controller	100VAC – 240VAC 50Hz -60Hz	68 VA maximum	68 W maximum
Monitor	100VAC – 240VAC 50Hz -60Hz	125 VA maximum	125 W maximum
Service Outlet	100VAC – 240VAC 50Hz -60Hz	500 VA maximum	500 W maximum

Required Operating Supplies by Customer for Installation

Item Description (including Dimensions etc.)	Vendor's Part Number (if applicable)	Recommended Quantity
DI Water		< 200mL
70% Ethanol		< 200mL
Container for non-hazardous waste		1
Location to temporarily store shipping materials		Box 1: 37" L x 30" W x 28" H (94 cm x 76 cm x 71 cm) Box 2: 26" L x 24" W x 11" H (66 cm x 61 cm x 28 cm)
CE certified power strip with 1800-watt minimum rating (120V/15A or 240V/7.5A) to accommodate up to five (5) power supplies for fully loaded models (including controller).		1

Special Requirements and Other Considerations

Gas management

- See the Customer Responsibilities section.
- If a gas controller accessory has been purchased with the instrument, please refer to the Gas Controller documentation.

Tools *(provided)*

- Your Agilent instrument comes with the following tools:
    - 9/64” and 3/32” hex wrenches.
    - Phillips #2 screwdriver.
    - Objective Setup Plate (PN 1942519).
    - Objective adapter collar wrench (PN 1222187).

Site Preparation Checklist

Use the following checklist to ensure that the site is properly prepared for Lionheart system installation.

- ☐ Prepare bench space for the Lionheart system. Ensure that the bench has the size and weight capacity to accommodate the Lionheart and associated components.
- ☐ Ensure that the Lionheart system has sufficient clearance to allow for airflow and heat dissipation.
- ☐ Ensure that the location in which the Lionheart system is being installed meets the requirements for environmental conditions.
- ☐ Ensure that appropriate gas plumbing is provided if a gas controller accessory will be used.
- ☐ Ensure access to laboratory gases (CO_2, N_2) and appropriate tubing, connections, and regulators. We recommend that you connect with your facilities team to ensure that institutional laboratory gas safety protocols are being met.
- ☐ Communicate with local IT department for computer setup, including internet connectivity for the imaging controller. If this is not feasible, please connect with your Agilent contact.
- ☐ Ensure there are at least four (4) electrical outlets close to the installation location. It is acceptable to use a power strip or uninterrupted power supply.

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Service Engineer Review (Optional)

Field Applications Scientist or Service Engineer Comments

If the Field Applications Scientist or Service Engineer completed a review of the Site Preparation requirements with you, they should complete the following Comments section.

If applicable, both the Field Application Scientist or Service Engineer and the customer must complete and sign the Site Verification section below.

If there are any specific points that should be noted as part of performing the service review or other items of interest for the customer, please write in this box.

Site Preparation Verification

Service Request Number:	Date of Review:
Service Engineer Name:	Customer Name:
Service Engineer Signature:	Total number of pages in this document:

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