

STX 220 Easy Clean

Operating Manual



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PREFACE

General

Before operating the instrument, the user must read and understand this manual.

LiCONiC regularly offers Operator Training Courses. We highly recommend attending such a course prior to working with the LiCONiC Instrument.

Purpose of this document

This Manual is intended to instruct the Logistics Workstation Operator how to operate the optional STX220 and do repairs and maintenance on an Operators' level.

Installation and Servicing

Installation, servicing and reinstallation of the instrument shall only be performed by System Integrators and/or service personnel authorized by LiCONiC AG.

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1 Product Description

1.1 Introduction

1.1.1 STX220 Easy Clean Overview



1.1.2 Intended Use

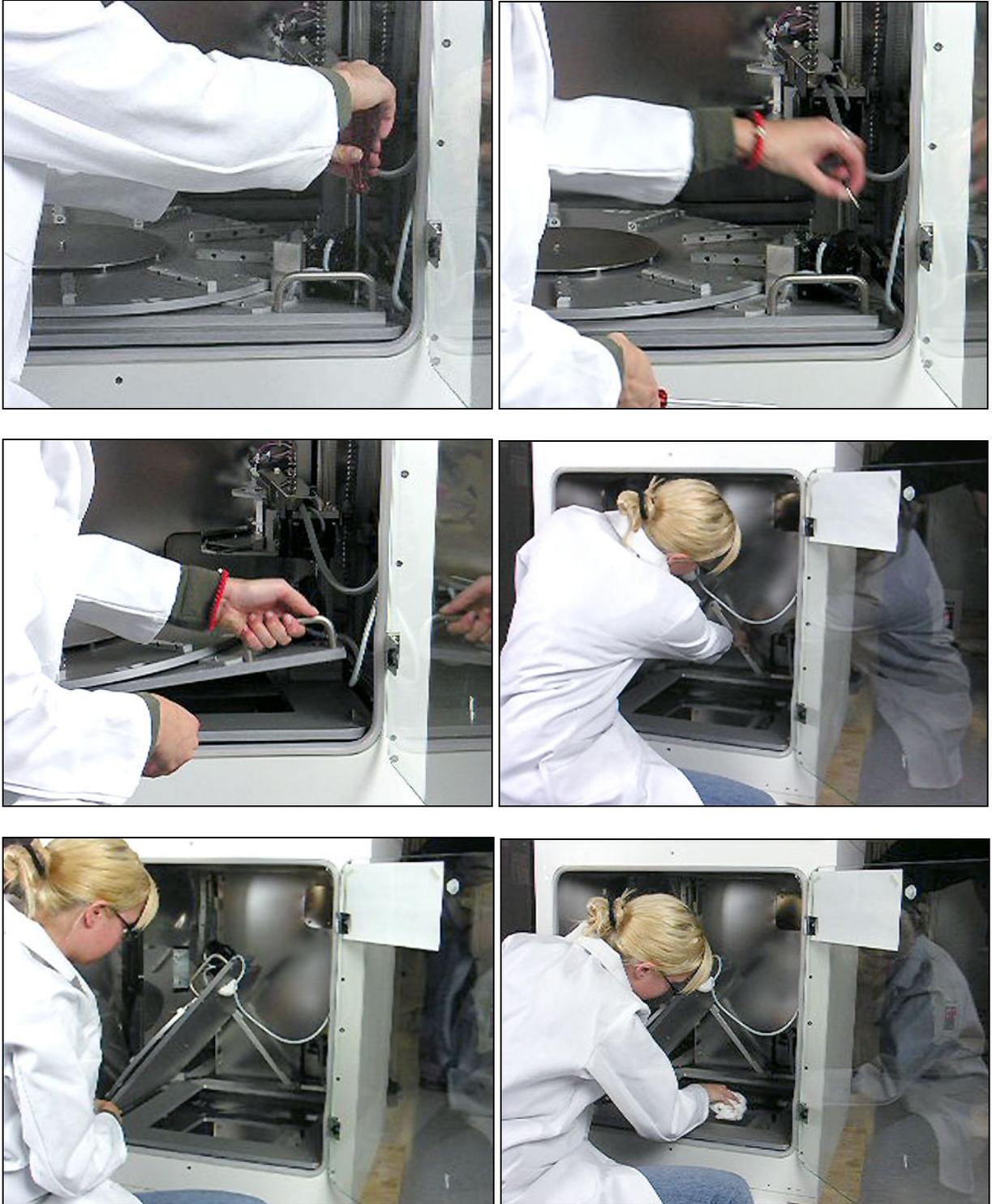
The easy clean option was designed to allow the user access for cleaning under the robotic carousel. By removing the hex-nut, lifting the carousel by the lift-handle, and locking the safety bar into position the under surface can be de-contaminated easily (Please see section 3.2 for visual procedure). ***Do not clean unit until the carousel is held into position with the safety bar.***

For high humidity units, all water should be pumped out of reservoir and wiped dry before cleaning solutions are used for best results.

After cleaning, the carousel should be lowered back into position and secured with the hex-nut. Hold the lift handle with one hand while you lower the safety bar back into down position. Slowly lower the carousel platform back to original position and secure with hex-nut to ensure alignments are kept.

2 Structure and Function

2.1 Function Description



3 Safety Instructions

3.1 Introduction

3.1.1 General

The STX220 is not a complete product for end use. It is delivered exclusively to Professional System Integrators who take full responsibility for safe installation and documentation of the entire system.

Do not operate until it has been established that the system, into which the STX220 has been incorporated is in compliance with all local safety regulations.

3.1.2 Definition

Operator: Any person who uses the equipment for its intended purpose.

System Integrator: Authorized person or company responsible for installation, initial start up and overall safety of the system.

Person or company to carry out service and maintenance task and therefore to be contacted in case of any problems with the system.

3.1.3 Target Group

The **integration Platform** has been conceived for applications in the research field, requiring highly qualified and authorized laboratory personnel.

Instrument operation requires thorough knowledge of applications, instrument functions and software programs as well as all applicable safety rules and regulations.

3.1.4 Importance of the Safety Instructions

This chapter contains general information assuring safe operation of the instrument.

More specific instructions in regard to safety are given throughout this manual, at the respective points where observation is most important.

Make sure that all Safety Instructions in this publication are strictly followed.

3.2 Warning Notices

Throughout this publication, Warning Notices are to be interpreted as follows:



WARNING

Indicates the possibility of severe personal injury, loss of life or equipment damage if instructions are not followed.



CAUTION

Indicates the possibility of severe equipment damage if instructions are not followed.



NOTE

Gives helpful information about the equipment.

3.3 Safety - Basics

General Operating Hazards

Carefully observe the following precautions:

Mechanical Hazards

Keep the housing and safety panels closed and never reach into the instrument work space when the unit is in operating mode.

Chemical, Biological and Radioactive Hazards

All samples and test kit components must be considered as potentially hazardous agents. Therefore a potential risk may arise from the liquids being handled by the pipetting instrument, such as infectious biological samples, toxic or corrosive chemicals, or radioactive substances. Strictly apply appropriate safety precautions according to local, state and federal regulations.

Prior to any first time application, test runs shall be made with a neutral liquid to allow optimization of all liquid handling parameters.

Handling and disposing of waste has to be in accordance with all local, state and federal environmental, health, and safety laws and regulations.

Prior to executing any maintenance task on the instrument or sending it or parts of it for repair, the instrument or the parts have to be thoroughly decontaminated.

See [Appendix A](#).

3.4 General Safety Regulations

3.4.1 Legal Requirements

Please consult the Manufacturer's Declaration, delivered with each unit by LiCONiC AG, listing all applied directives and standards.

In Europe, the System Integrator must provide a Conformity Declaration upon final installation of the entire system.

3.4.2 General Inspection and Maintenance Duties

Only an authorized System Integrator shall carry out inspection, maintenance and repair tasks.

3.4.3 Spare Parts to be used

Use only original LiCONiC Spare Parts. If other parts are used during the normal warranty period, the manufacturer's guarantee may be invalidated.

3.4.4 Modifications

Modifications shall only be carried out by an authorized System Integrator. LiCONiC AG will not accept responsibility for any claim resulting from unauthorized modification or alteration.

3.5 Installation

Only a trained System Integrator shall install the STX220.

CAUTION

The Logistics Workstation and the STX220 must be installed on the same table.



After installation, do not move either of them. Correct function of microplate transfer between the Workstation and the Carousel deeply depends on the position of the Carousel in relation to the Logistics Workstation.

3.5.1 Safety Panels

The STX220 scope of delivery does not include a front safety panel. The System Integrator and/or Operator are responsible for taking appropriate safety and protective measures.

3.5.2 Stack Configuration

CAUTION

Do not add or remove microplate supports.

If you remove a stack whose platform configuration is set up as to receive Halfheights or Deep Well Plates, make sure to put it back to exactly the same position on the carousel.



The lift has been taught to exactly drive to the respective positions. Altering positions will result in destinations not found or crashes.

Only a trained System Integrator shall alter the instrument configuration and teach the lift accordingly.

3.5.3 Electrical Connection

CAUTION

Switch the Logistics Workstation off before connecting and disconnecting the STX220.



Electronics of the Carousel will be damaged if done while the instrument is switched on.

Disconnect the RS232 interface only with power switched off.

3.5.4 Barcode Scanner

WARNING



*Laser Class 2. Laser light - do not stare into the beam.
Might be harmful for your eyes.*

3.5.5 Functional Notes, Precautions

NOTE



To ensure proper operation, the Laser Beam Output Window must be perfectly clean at all times. Even slight soiling will cause reading errors.

NOTE



The Barcode Reader CANNOT read barcodes in the Stack's topmost position. Therefore if working with plate identification, use only 21 positions, i.e. do not place microplates on the topmost platform.

4 Maintenance

For optimum performance and reliability of the instrument, regularly carry out the Maintenance and Cleaning Tasks described in this Chapter.

4.1 Decontamination

In order to protect Service and Repair Personnel, contaminated instruments or instrument parts must be decontaminated according to standard laboratory regulations. Copy and fill in the Decontamination Form, [Appendix A](#), and follow the instructions in this form before:

- a Service Technician carries out any service or repair work,
- an instrument or parts of an instrument are shipped to the Sales Representative or the manufacturer, e.g. for repair. The filled-out form must be enclosed with the material.

4.2 Cleaning



CAUTION

To clean instrument surfaces (e.g. Rotating Plate, Stacks etc.), always turn off the power by switching off the Workstation.



CAUTION

Strong detergents might dissolve casing surface coating.

4.2.1 Cleaning Agents

Alcohol: Use Ethanol, 2-Propanol or Isopropanol.

Instrument part	Agent	See Section
Casing	Alcohol	
Stacks	Alcohol, acetone	
Scanner output window	Alcohol	Barcode Scanner
Shovel guide	None	Section 5.3.2

4.2.2 Cleaning Tasks

5 Repair

There are no Repair tasks at Operator's level to be performed on the STX220.

If you encounter any problems with your instrument, please contact the authorized System Integrator or LiCONiC. Addresses see rear of title page.

For Troubleshooting, refer to [Section 4.4 Failure](#).

6 Disposal

6.1 Disposal

LiCONiC instruments and parts are made of environmentally inert materials which can all be discarded according to the normal waste regulations applicable in the specific country. However,

WARNING



Depending on the applications run, parts of the unit may have been in contact with biohazardous, poisonous or even radioactive materials.

Make sure to treat these materials according to the applicable safety standards and regulations!

Appendix A

Decontamination Form

Copy the form on the following page. This form needs to be filled out completely and signed by authorized persons. The form needs to be shipped with unit and no product will be accepted without proper documentation. Instructions and information for the form can be found throughout this manual.

DECONTAMINATION FORM

Prior to repairing or servicing the instrument or parts, shipping it to the distributor or manufacturer, the instrument or affected parts must be thoroughly decontaminated and this form filled-out and enclosed.

I hereby declare that the contents of this package have never been exposed to hazardous biological and/or radioactive material or that such parts have been decontaminated or disinfected to remove or inactivate any biological and/or radioactive material which could be dangerous to service personnel.

Instrument Type: Serial No.:

Parts:

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

Name:

Function:

Company:

Address:

.....

.....

Country:

Date of Decontamination:

Type of Disinfectant used:

.....

Date: Signature: