

# X8™ OneTouch

## An integrated solution for Nucleic Acid Extraction

**FOR USE WITH:**

X8™ DNA & RNA Cartridge Kits



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# Notices

## Manual Part Number

CGU-0001-EN Rev C

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For technical information or advice, please contact our Customer Technical Support Division online at any time.

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# Revision Summary

## Document Number

CGU-0001-EN Rev C

## Effective Date

September 22, 2023

## Revision

Complete Document Overhaul

# Introduction

## 3.1 Platform Overview

Thank you for choosing the automated Xceler8™ Nucleic Acid Extraction Platform. We are confident it will become an integral part of your sample preparation workflow.

The Xceler8 Platform is a novel molecular solution that enables comprehensive fully automated nucleic acid extraction from a variety of biological samples. The small footprint of X8 OneTouch (50.5 X 29 X 30 cm, W X D X H) easily fits on any lab bench or biological safety cabinet. The X8 OneTouch comes with 8 individually controlled Bluetooth bays.

The ease-of-use touch screen tablet with proprietary X8 application allows users to command each bay separately by loading different nucleic acid protocols. Interactive real time instruction on tablet guides the user through each step ensuring a smooth operational experience. Attributed to the state of art design of our cartridges, nucleic acid in the biological sample will be purified and eluted into a pre-inserted microcentrifuge tube.

The ready-to-use X8 Cartridge kits includes all the necessary buffers and reagents for nucleic acid extraction.

The X8 OneTouch is a plug-and-play instrument, making the installation easy. Trained and experienced personnel that are familiar with laboratory equipment should oversee the installation.

Before using the X8 OneTouch, it is essential to read this Operating Manual carefully and to pay attention to safety information.



### 3.2 Intended Purpose

The X8 OneTouch is exclusively designed to be used with X8 Cartridge Kits to perform automated extraction of nucleic acids. Please visit <https://onebiomed.com/products/> for available X8 Cartridge Kits.

The X8 OneTouch is not intended for use with kits other than the X8 Cartridge Kits or with samples other than those defined within the user manual. The X8 OneTouch is for **Research Use Only**. The product is not intended for use in diagnostic procedures.

### 3.3 Product Use Limitations

Automated nucleic acid extraction can only be performed using One BioMed's X8 Cartridge Kits.

### 3.4 Product Components

Upon receiving your X8 OneTouch, please inspect the package carefully to make sure all components are present and that the packaging has not been damaged during shipping. If any item is damaged, contact our Customer Technical Support Division via email [support@onebiomed.com](mailto:support@onebiomed.com)

The X8 OneTouch Instrument (Cat# X8-OT-101-IN) includes:

- 1 X8 OneTouch Instrument
- 1 Power cable with an adaptor
- 1 Set each of 8 Elution tube holders (0.5 mL and 1.5 mL sizes)

To be received separately:

- 1 Tablet PC preloaded with X8 Application
- 1 Power cable for the Tablet PC

### 3.5 Installation Requirements

The X8 OneTouch is intended for indoor use only, install in a location that meets the following criteria:

- Place instrument on a sturdy, level surface.
- The power switch should be located within 1.5 m of the power socket on the back of the X8 OneTouch
- Choose a location that has proper ventilation and is not exposed to direct sunlight.
- Keep sufficient working space for accessories and maintenance.
- Connect the X8 OneTouch to an uninterrupted power supply.
- Installed in a location that has a clearance of 15 cm from the back of the instrument for proper ventilation

- Avoid electrically noisy environment (e.g., power generators).
- Do not use adaptors in place of an IEC power cable
- Do not place next to heat sources
- Do not place the instrument near flammable gases or liquids.

### 3.6 Product Specifications

PARAMETER	SPECIFICATIONS						
Weight	<ul style="list-style-type: none"> <li>• 12.7 kg (28 lb)   In box 17 kg (37.5 lb)</li> </ul>						
Instrument Dimensions	<table border="1"> <thead> <tr> <th>W</th> <th>D</th> <th>H</th> </tr> </thead> <tbody> <tr> <td>50.5 cm [19.9"]</td> <td>29 cm [11.4"]</td> <td>30 cm [11.8"]</td> </tr> </tbody> </table>	W	D	H	50.5 cm [19.9"]	29 cm [11.4"]	30 cm [11.8"]
W	D	H					
50.5 cm [19.9"]	29 cm [11.4"]	30 cm [11.8"]					
Box Dimensions	<table border="1"> <thead> <tr> <th>W</th> <th>D</th> <th>H</th> </tr> </thead> <tbody> <tr> <td>65.5cm [25.8"]</td> <td>44 cm [17.3"]</td> <td>18.9" [48 cm]</td> </tr> </tbody> </table>	W	D	H	65.5cm [25.8"]	44 cm [17.3"]	18.9" [48 cm]
W	D	H					
65.5cm [25.8"]	44 cm [17.3"]	18.9" [48 cm]					
Adaptor Electrical Requirements	<ul style="list-style-type: none"> <li>• MEAN WELL GST280A24-C6P Only</li> <li>• INPUT: 100-240 V~, (50/60) Hz, 4.5 A</li> <li>• OUTPUT: 24 Vdc/11.67 A</li> </ul>						
Power	<ul style="list-style-type: none"> <li>• 24 VDC(±5%)/11.67 A</li> </ul>						
Bluetooth	<ul style="list-style-type: none"> <li>• Frequency: 2.402 GHz to 2.480 GHz</li> <li>• RX Sensitivity: -90 dBm (BR/EDR), -92 dBm (LE)</li> <li>• Class 2 Output (+1.5 dBm typical)</li> <li>• Classic SPP</li> <li>• Certified to CE, FCC, ISED, MIC, KCC, NCC, SRRC, WPC</li> </ul>						
Operating Temperature	<ul style="list-style-type: none"> <li>• 15-25 °C [59-77 °F]</li> </ul> <p>Use in a typical indoor laboratory environment. Extreme temperature conditions will affect the performance of the instrument.</p>						
Humidity	<ul style="list-style-type: none"> <li>• 30-80% RH</li> </ul>						
Altitude	<ul style="list-style-type: none"> <li>• Altitude up to 2000 m above sea level</li> </ul>						
Power Cable Length	<ul style="list-style-type: none"> <li>• 1.5 m standard</li> </ul>						
Cooling Method	<ul style="list-style-type: none"> <li>• Forced convection</li> </ul>						
Pollution Degree	<ul style="list-style-type: none"> <li>• 2- Normally only non-conductive pollution occurs. Temporary conductivity caused by condensation is to be expected.</li> </ul>						

# Safety and Compliance

## 4.1 General Notes

Read and understand all operating and safety instructions prior to installation and operation of the X8 OneTouch. Observe all safety notes and symbols listed in this operating manual.

Pay attention to the safety symbols for the handling, storage, and disposal of the X8 Cartridge Kits. Use only consumables and reagents provided or recommended by One BioMed Pte Ltd.

The safety instructions provided in this user manual are meant to supplement, not to supersede the local and workplace safety regulations and accident prevention measures.

## 4.2 Safety and instrument use

1. Changes or modifications to the X8 OneTouch, not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
2. Do not use the X8 OneTouch in proximity to sources of strong electromagnetic radiation (e.g., unshielded intentional RF sources), as these may interfere with the proper operation.
3. Always disconnect the power to the X8 OneTouch and the Tablet PC before cleaning or performing routine maintenance.
4. Do not disassemble the X8 OneTouch.
5. Ensure the X8 Cartridges and elution tubes have been securely inserted in their correct positions and orientations. Failure to do so may result in damage to the X8 OneTouch.
6. Do not reuse X8 Cartridges or elution tubes.
7. If the X8 OneTouch is used in a manner other than that specified by the manufacturer, the warranty provided for the instrument may be voided.
8. Keep hands clear of the cartridge bay doors.
9. After elution, the thermal heating plate inside the cartridge bay may become hot. Do not touch. Cartridge bay door will slightly be ajar for ventilation under these two situations: (a) machine initialization "equilibrium" step and (b) removal of cartridge after elution, please refrain from touching the thermal heating plate.
10. To avoid strain or injury, use lifting aids and proper lifting techniques










when removing or shifting the X8 OneTouch. Ensure adherence to local and workplace safety guidelines.

11. Do not manually pry the door open or override the door sensor during protocol operation. Manipulation of X8 One Touch is performed solely by the X8 application.
12. The X8 OneTouch can be used with potentially biohazardous materials, or potentially hazardous chemicals. Use appropriate personal protective equipment (gloves, safety goggles, lab coat, etc.) for handling and disposing of biohazardous materials.
13. Do not load any additional software programs on the Tablet PC supplied with the X8 OneTouch. Additional programs may cause the application to slow down.
14. The USB-C hub on the rear of the X8 OneTouch is for use by qualified One BioMed service personnel or authorized distributor. It may be used only for updating or upgrading the firmware of the X8 OneTouch or for troubleshooting purposes. Do not connect to the USB-C ports unless specifically instructed by an authorized One BioMed personnel to do so.
15. Ensure that the X8 OneTouch remains dry at all times. Exposure to water or other liquids may result in electric shock or burns.
16. Before operating the X8 OneTouch, please ensure that everyone involved with the operation of the instrument has:
  - i. Received general laboratory safety training.
  - ii. Received training in safety practices for the X8 OneTouch instrument.
  - iii. Read and understood all related Safety Data Sheet (SDS) documents.

### 4.3 Safety Markings

Important safety markings:

SYMBOLS	DESCRIPTION
	<b>General warning.</b> Risk of personal injury to the operator or a safety hazard to the instrument or surrounding areas.
	<b>Electrical hazard.</b> Presence of electrical components that can be harmful to the operator if handled incorrectly.
	<b>Mechanical hazard.</b> Presence of moving mechanical parts that can be harmful to the operator if handled incorrectly.
	<b>Biohazard.</b> Presence of biological samples that can be harmful to the operator if handled incorrectly.
	<b>Burn hazard.</b> Presence of hot surfaces that can cause burns to the operator if handled incorrectly.
	<b>Direct current.</b> Electric charge flow in a circuit only in one direction.
	<b>Alternating current.</b> Electric charge flow in a circuit that changes direction periodically.

### 4.4 Regulatory Markings

The X8 OneTouch has been designed, tested, and certified to be in compliance with the following standards:

SYMBOLS	DESCRIPTION
	IEC/EN 61010-1:2010+A1:2019. Safety requirements for electrical equipment for measurement, control, and laboratory use.
	<b>Product Certification.</b> CE Mark indicates that the X8 OneTouch is covered by a Declaration of Conformity, and has been declared in conformity with the provisions of all applicable directives in the European Union.
	<b>Product Certification.</b> The KC (Korea Certification) mark signifies compliance with Korea's product safety requirements for electrical and electronic equipment.
	<b>WEEE Directive (2012/19/EU).</b> Waste Electrical and Electronic Equipment. <b>RoHS Directive (2011/65/EU).</b> Restriction of the use of certain hazardous substances in electrical and electronic equipment.

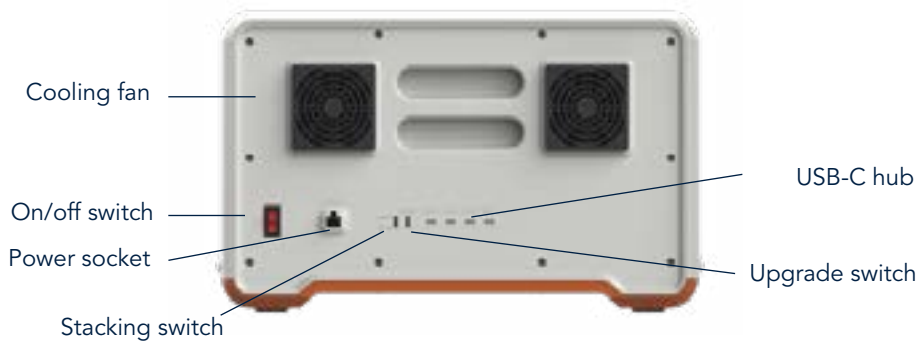
# Xceler8 Platform

## 5.1 X8 Platform Overview

The X8 platform includes the following peripherals for seamless nucleic acid extraction.



**Caution: Electrical hazard.** Always disconnect the power to the instrument and the Tablet PC in case of liquid spillage, before cleaning or performing routine maintenance.



SYMBOLS	DESCRIPTION
	Power on. Turn the power switch to this position to power on the X8 OneTouch Instrument.
○	Power off. Turn the power switch to this position to power off the X8 OneTouch Instrument.

### 5.2 Bay Configuration

The X8 OneTouch can rapidly and efficiently extract nucleic acids from up to 8 samples at a time. The cartridge bays on the X8 OneTouch are numbered and configured as shown below.



### 5.3 Cartridge Bay

Each cartridge bay has a thermal plate inside it that is used for heating during nucleic acid extraction. The cartridge bay door doubles as a safety feature, protecting the user from the heat of the thermal plate. When the X8 OneTouch's bay is not in operation, the door remains closed. Once the desired extraction protocol is selected, the bay door will open and the X8 Cartridge can be inserted.

The bay door will remain open throughout the extraction process. Once the X8 Cartridge has been removed at the end of the extraction, the bay door will remain ajar at about 6mm for the thermal plate to be cooled. The bay door will automatically close when the temperature of the plate falls to 40°C.



**Caution: Hot surface.** When the cartridge bay is open DO NOT touch the thermal plate.



**Caution: Mechanical hazard.** DO NOT put your hand into the cartridge bay.

#### 5.4 The Tablet PC and X8 Application

The Tablet PC displays the X8 App's operational user interface for driving this self-guided system. The Tablet PC comes pre-installed with the X8 Application. It is configured to read the QR code on the X8 Cartridges.

The Tablet PC must meet the following specifications: OS Android 9.0 Pie or higher; Minimum resolution-1920 x 1200; Bluetooth module version-5; Minimum RAM. 2 GB; Charging port- USB-C, Camera function.



#### 5.5 X8 Cartridges

The X8 system is intended to be used with X8 cartridges. Users can choose the Cartridge type depending on the extraction protocol and source material. Sample preparation is described in detail in each X8 Cartridge Kit manual.

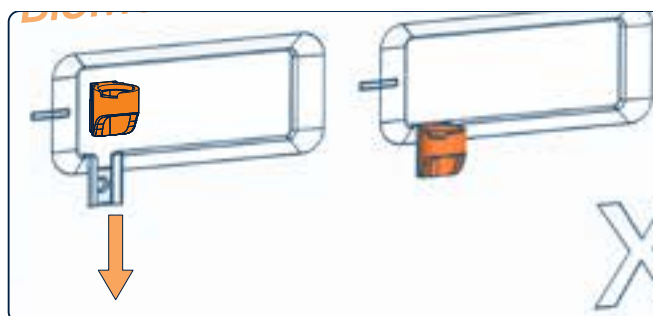
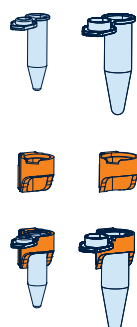
# Platform Setup

## 6.1 Unpacking and setting up the X8 OneTouch

Ensure the selected location meets the requirements specified in section 3.5.

1. Carefully remove the X8 OneTouch instrument from its box.
2. Remove the packaging material from around the X8 OneTouch.
3. Place the X8 OneTouch on a flat, stable surface. Leave at least 15 cm (5 inches) of clearance from the back.
4. Select the appropriate size of the elution tube holder and slide it into place for all the cartridge bays on the X8 OneTouch.

0.5 mL 1.5 mL



## 6.2 Setting up the Tablet PC

1. Remove the Tablet PC from the box.
2. Connect the Tablet PC to a power supply.
3. Press the Tablet PC power switch to turn the Tablet PC "On".

## 6.3 Connecting the X8 OneTouch

Connect the X8 OneTouch to a power outlet as per the following instructions.

1. The power switch should be located within 1.5 m of the power socket on the back of the X8 OneTouch.
2. Ensure that the On/Off switch is in the Off position when plugging in the X8 OneTouch power cable to avoid malfunction of the instrument.
3. Connect the power cable to the adapter and insert it into the power socket at the rear of the X8 OneTouch.
4. Plug the power cable to a wall outlet. We recommend connecting the

X8 OneTouch to an uninterrupted power supply.





5. Switch the X8 OneTouch "On" using the On/Off switch. The status LED lights will turn WHITE when it is powered on.
6. Every time the X8 OneTouch is turned on, it will perform a self-diagnostic test.
7. Turn on the X8 Tablet PC and launch the X8 App. The status LED will then turn OFF once the X8 OneTouch Instrument is paired correctly to the X8 Tablet PC.
8. The X8 OneTouch is now ready for operation.





#### 6.4 X8 Application

The X8 App allows the user to choose the desired cartridge bays to run samples, select various protocols, input sample notes and create run reports. The application displays instructions to guide the user through the extraction process ensuring all important steps are accounted for. The remaining time of the extraction is displayed on each bay.

#### 6.5 LED Overview

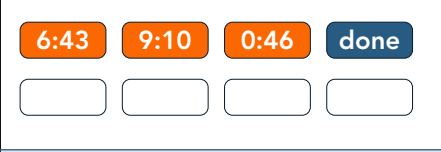


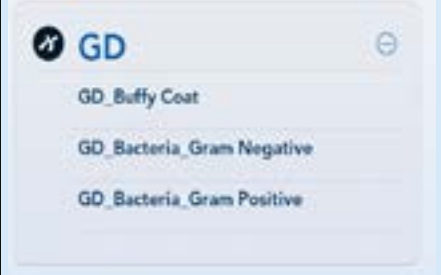
The X8 OneTouch has status LEDs located on the left of each of the eight cartridge bay doors. The LED light indicates the operating status of the individual cartridge bay.

LED COLOR	DESCRIPTION
	<p><b>OFF</b> when the X8 OneTouch is not powered on or once the X8 OneTouch is paired correctly to the Tablet PC.</p>
	<p><b>WHITE</b> when the X8 OneTouch is powered on and not paired to the Tablet PC.</p>
	<p><b>GREEN</b> when the cartridge is inserted correctly into the cartridge bay.</p>
	<p><b>ORANGE</b> when an automated extraction protocol is running.</p>

	<p><b>BLUE</b> when an automated extraction protocol is complete.</p>
	<p><b>YELLOW</b> when the bay is equilibrating after a run.</p>
	<p><b>RED</b> when there is an error</p>
	

### 6.6 Navigational Features of X8 Application

The X8 OneTouch operation is controlled by the touchscreen Tablet PC.

NAVIGATION BUTTONS	DESCRIPTION
	<p>Tap to select an available cartridge bay from the X8 App dashboard.</p>
	<p>Use the touchscreen keyboard to input the sample information or sample notes.</p>
	<p>Use the touchscreen number pad to input the tube ID.</p>
	<p>Scroll up or down to choose the automated extraction protocol based on the nucleic acid to be extracted and the sample type.</p>



	<p>Press the <b>open bay</b> button to open the selected cartridge bay and insert the X8 Cartridge.</p>
	<p>Press the <b>start run</b> button to start the chosen automated extraction protocol.</p>
	<p>Press the <b>abort run</b> button to abort an automated extraction run.</p>
	<p>Tap on the <b>notes</b> icon to add sample notes using the touchscreen keypad.</p>
	<p>Tap on the <b>run summary</b> icon to review the run summaries of the automated extractions.</p>
	<p>Tap on the <b>settings</b> icon to make changes to the settings of the X8 Application.</p>

### 6.7 Starting a run on Standard Mode

The standard mode on the X8 OneTouch is the default mode to select and run the various automated protocols across the different cartridge bays.

1. Tap to select an available cartridge bay from the X8 Application dashboard.



2. Scan the QR code on the X8 Cartridge label using the X8 Tablet camera to automatically input the Cartridge ID and load the automated protocols associated with the X8 Cartridge type.

**Note.** On scanning the Cartridge ID the product icon will appear to further confirm the Cartridge type being used for the automated extraction.



3. Input sample name using the Tablet PC's touchscreen keyboard.



**Optional.** To add Tube ID information scan the Tube ID barcode using the Tablet PC's camera or type in the details of the Tube in the Tube ID section using the touchscreen keyboard.

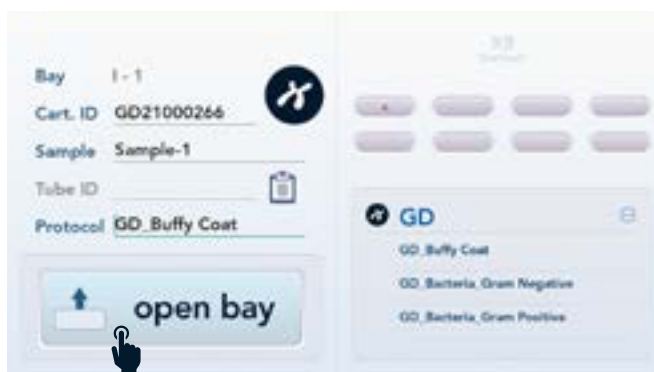
4. Scroll and select the automated protocol appropriate for the sample type from the protocol section on the bottom right of the screen.



**Optional.** Tap on the notes icon to add sample notes using the touchscreen keypad.

5. Tap on the **open bay** button to automatically open the selected cartridge bay.

**Note.** DO NOT try to open the cartridge bay manually.



6. Insert an open, sterile microcentrifuge tube into the elution tube holder on the front panel of the X8 OneTouch Instrument.

**Note.** Once the automated protocol is complete, the extracted nucleic acid will be eluted automatically into this elution tube.

7. Verify that sample has been added to the sample well of the X8 Cartridge and that the sample cap has been tightly closed.

**Note.** Ensure the rim of the sample well is clean and the sample cap is closed tightly.

8. Verify that elution buffer has been added and the LyoCap has been assembled on the X8 Cartridge.

**Note.** Verify the foil is clean and dry before applying the tape.

9. Insert the X8 Cartridge in the proper orientation (as indicated by the arrow on the X8 Cartridge label), all the way into the cartridge bay until a click is felt.

**Note.** The LED status of the cartridge bay will turn **GREEN** when the X8 Cartridge is inserted correctly.



10. Tap on the **start run** button to start the automated protocol.



11. The progress of the automated extraction protocol will be displayed as a countdown clock on the selected cartridge bay of the X8 App dashboard.

**Note.** DO NOT eject the X8 Cartridge when an automated run is in progress.



12. The cartridge bay on the X8 App dashboard will turn blue and display **DONE** message once the automated protocol is complete.

**Note.** The LED status of the cartridge bay will blink **BLUE** to notify the completion of the automated protocol.



13. Remove the X8 Cartridge from the cartridge bay and discard it in a designated biohazard waste bag.



**Burn hazard.** When taking out the X8 Cartridge from the cartridge bay DO NOT touch the thermal plate inside, as it can be hot. Following an automated extraction run, the base of the X8 Cartridge may be warm to the touch.



**For single use only.** The X8 Cartridges are intended for single use only. Do not re-use.

14. Once the X8 Cartridge has been removed, the door to the cartridge bay will automatically close in 10 seconds.

**Note.** DO NOT try to close the cartridge bay door manually.



**Mechanical hazard.** DO NOT put your fingers into the cartridge bay when the door is open.

15. Carefully remove the elution tube with the extracted nucleic acid from the tube holder and close the cap tightly. The eluted nucleic acid is now ready for a variety of downstream applications.

16. After completing an automated protocol run, the cartridge bay will undergo an equilibration step to bring the thermal plate back to normal temperature.

**Note.** It may take up to 10 minutes to finish equilibration. Cartridge bays that are equilibrating cannot be selected for the next automated run until the step is complete. The cartridge bay door will open slightly to aid the cooling of the thermal plate, and the LED indicator will turn yellow.



### 6.8 Starting a run on Multi-bay Mode

The multi-bay mode is useful when running the same automated protocol across multiple samples. In this mode multiple cartridge bays can be selected and operated simultaneously to make the workflow more efficient and rapid.

**Note.** The multi-bay mode does not support input of sample information. If input of sample information is required then samples must be run using the standard mode.

1. Tap on the multi-bay icon to activate the multi-bay mode.



2. Select the number of cartridge bays based on the number of samples to be run by tapping on the individual bays displayed on the X8 App dashboard.

**Note.** Only available bays can be selected for starting the new run.



3. Select the cartridge type by tapping on the product icon displayed on the X8 Cartridge label.



4. Next scroll and select the automated protocol appropriate for the samples being processed.

**Note.** User can select only one automated protocol for each batch of X8 Cartridges being run in the multi-bay mode.



5. Tap the **open bays** button to automatically open the selected cartridge bays.

**Note.** DO NOT try to open the cartridge bays manually.



6. Insert open, sterile microcentrifuge tubes into the elution tube holders on the front panel of the X8 OneTouch Instrument.
7. Verify that samples have been added to the sample wells of the respective X8 cartridges and that the sample caps have been closed tightly.

**Note.** Ensure the rim of the sample well is clean.

8. Verify that elution buffer has been added and the LyoCap has been assembled on the X8 Cartridge.

**Note.** Verify the foil is clean and dry before applying the tape.

9. Insert the X8 Cartridges in their proper orientation (as indicated by the arrow on the X8 Cartridge label), all the way into the cartridge bays until a click is felt.

**Note.** The LED status of the cartridge bays will turn **GREEN** when the X8 Cartridges are inserted correctly.



10. Once all the selected bays have cartridges inserted correctly, press the **start runs** button to simultaneously start the automated extraction protocol for all the selected cartridge bays.





11. The progress of the automated extraction protocol will be displayed as a countdown clock on the respective cartridge bays on the X8 App dashboard.

**Note.** DO NOT eject the X8 Cartridge when an automated run is in progress.



12. Once the automated extraction protocol is complete, a **DONE** message will be displayed on the respective cartridge bays on the X8 App dashboard.

**Note.** The LED status of the cartridge bays will blink **BLUE** to notify the completion of the automated protocol.



13. Remove the X8 Cartridges from the cartridge bays and discard it in a designated biohazard waste bag.



**Burn hazard.** When taking out the X8 Cartridges from the cartridge bays DO NOT touch the thermal plate inside, as it can be hot. Following an automated extraction run, the base of the X8 Cartridges may be warm to the touch.



**For single use only.** The X8 Cartridges are intended for single use only. Do not re-use.

14. Once the X8 Cartridges have been removed, the doors to the cartridge bays will automatically close after equilibration.

**Note.** DO NOT try to close the cartridge bay doors manually.



**Mechanical hazard.** DO NOT put your fingers into the cartridge bay when the doors are open.

15. Carefully remove the elution tubes with the extracted nucleic acid from the tube holders and close the cap tightly. The eluted nucleic acid is now ready for a variety of downstream applications.
16. After completing an automated protocol run, the cartridge bays will undergo an equilibration step to bring the thermal plate back to normal temperature.

**Note.** It may take up to 10 minutes to finish equilibration. Cartridge bays that are equilibrating cannot be selected for the next automated run until the step is complete. The cartridge bay doors will open slightly to aid the cooling of the thermal plate.



### 6.9 Aborting a Run

1. To abort an automated protocol run go to the cartridge bay that needs to be aborted and press the **abort run** button.

**Note.** Individual bays can be aborted in the multi-bay mode.



2. A confirmation prompt will appear to confirm if the run should indeed be aborted. Select **YES** to abort the run or **NO** to continue the automated protocol.



3. Once the automated run is aborted the X8 Cartridge can be removed and discarded appropriately and the elution tube can be removed.

**Note.** The LED status of the cartridge bay will turn **RED** to notify that the automated protocol was aborted.



**Burn hazard.** When taking out the X8 Cartridges from the cartridge bays DO NOT touch the thermal plate inside, as it can be hot. Following an automated extraction run, the base of the X8 Cartridges may be warm to the touch.



**For single use only.** The X8 Cartridges are intended for single use only. Do not re-use.



- 4. The X8 App dashboard will display an **ABORTED** message on the cartridge bay in which the run was aborted.



### 6.10 Turning off the X8 OneTouch

- 1. Do not switch off the X8 OneTouch during an automated run. Wait until all processes of the extraction protocol have been completed.
- 2. If there is a loaded cartridge bay, eject the X8 Cartridge once the run is complete and wait until the bay complete equilibration.
- 3. Shut down the Tablet PC.
- 4. Switch off the X8 OneTouch using the On/Off Switch on the rear of the Instrument.

# Settings

## 7.1 X8 Application Settings

1. Tap on the **menu** icon, which will then expand into settings and run summary icons.



2. Tap on the **settings** icon to make changes to the settings of the X8 App.

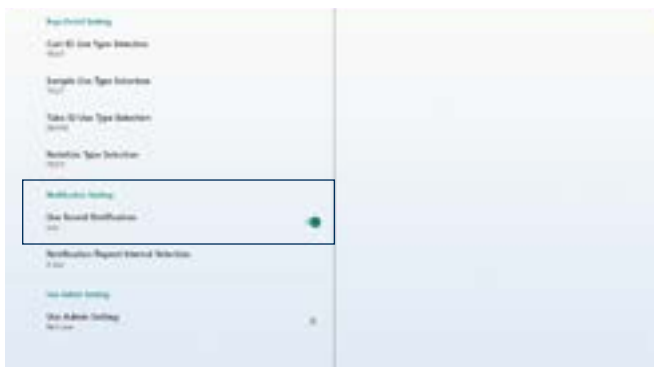


3. Select from options such as NONE, TEXT or QR/DataMatrix for Cartridge ID, Sample, Tube ID and Notes to customize the sample input section.



**Note.** The default setting will have QR/DataMatrix selected for Cartridge ID to enable scanning of the Cartridge QR code using the Tablet PC camera, TEXT for Sample and Notes and NONE for Tube ID as this is optional.

4. Turn on the sound notification by swiping the button to the right. This will provide sound notification to users at the end of every automated run or if there is an error during the protocol.



- 5. The sound notification can be adjusted to 1, 3 or 5 second intervals by selecting the Notification Repeat Interval Selection.

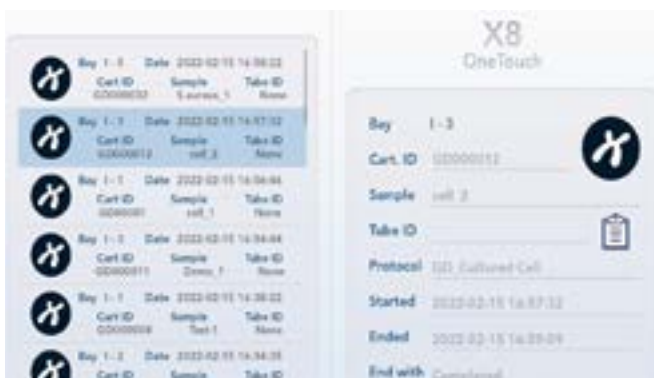


## 7.2 Run Summary

- 1. Tap on the **run summary** icon to review the run summaries of the automated extractions being performed on the X8 OneTouch.



- 2. The run summary section will show Bay, Cartridge ID, Sample details, Protocol, Start and End times of the automated run and also run status (e.g., completed, aborted etc.)



# Troubleshooting

## 8.1 Run Failures

The Tablet PC will guide the user through recoverable failures. If the error continues, contact One BioMed Technical Support.

1. **Sample cap error.** If the sample cap of the X8 Cartridge is not closed tightly a sample cap error will be displayed. The cartridge bay with sample cap error will show a **CHECK CART** message on the X8 App dashboard.



2. Tap the cartridge bay displaying the error. In the cartridge bay view there will be an error message stating **Please check sample cap.**



3. To rectify the error, take out the X8 Cartridge and reapply the sample cap firmly. Re-insert the X8 Cartridge and press the **start run** button.



4. **Critical Failures.** When the X8 OneTouch has seen a critical error, the run will immediately abort. Do not proceed with any further runs. Contact [support@onebiomed.com](mailto:support@onebiomed.com) with a screen capture of the error message if displayed on the Tablet PC.
5. **Bluetooth connection failure.** Restart the X8 OneTouch and attempt to reconnect. Contact [support@onebiomed.com](mailto:support@onebiomed.com) if the Bluetooth connection failure persists.
6. **Jammed cartridge bay door.** Restart the X8 OneTouch to release the jammed cartridge bay door.

## 8.2 Best Practices

1. DO place the X8 OneTouch near a properly grounded (earthed) AC power outlet. The power line to the instrument should be voltage regulated and surge protected.
2. DO turn ON the X8 OneTouch before launching the X8 App on the Tablet PC.
3. DO ensure the sample well is tightly closed before inserting the X8 Cartridge into the X8 OneTouch.
4. DO ensure the elution buffer well is sealed tightly before inserting the X8 Cartridge into the X8 OneTouch.
5. DO turn the X8 OneTouch OFF after use by switching the power button at the back of the instrument off.
6. DO close the X8 App and turn OFF the Tablet PC after use.
7. DO keep the Tablet PC charged during an automated run or when not in use.
8. DO NOT operate the X8 OneTouch if water or reagent has spilled inside the instrument. Disconnect the X8 OneTouch from the line power supply and contact One BioMed Technical Support at [support@onebiomed.com](mailto:support@onebiomed.com).



# Maintenance

## 9.1 Cleaning

Wipe up spills immediately. Occasionally, use a soft lab towel to clean the X8 OneTouch with a mixture of mild detergent and distilled water. For deeper, more thorough cleaning, it is acceptable to use a 70% ethanol wash. Contact your authorized distributor or One BioMed for spills inside the instrument.

**Note.** Do not use acetone or other harsh solvents as these may remove the colored markings on the X8 OneTouch. Apply all standard safety practices when using cleaners, and dispose of any generated waste in a responsible manner.



**Caution: Electrical hazard.** Always disconnect the power to the instrument and the Tablet PC before cleaning or performing routine maintenance.

## 9.2 Servicing

Do not open the X8 OneTouch. There are no user serviceable parts inside. Refer all servicing to qualified One BioMed service personnel.

Servicing is required when the X8 OneTouch has been damaged in any way, e.g., a power entry module or plug is damaged, liquid was spilled into, or objects fell into the instrument, the instrument does not operate properly, or has been dropped.

Use only the power cord supplied with the X8 OneTouch. Do not replace it with a non-approved power cord as it may be inadequately rated to handle the electrical load.

When requesting a repair on the X8 OneTouch, please take steps to ensure that the instrument has been decontaminated so as not to pose a hazard for One BioMed service personnel.



**Caution: Electrical hazard.** Always disconnect the power to the instrument and the Tablet PC in case of liquid spillage, before cleaning or performing routine maintenance.

## RESOURCES

We are dedicated to helping you get the most out of your Xceler8 Platform by offering multiple helpful resources:

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### Products page

Explore our ever-growing portfolio of products that Xceler8 your sample preparation workflow.

[onebiomed.com/products/](https://onebiomed.com/products/)

### Support

Email us for product support and feedback.

[support@onebiomed.com](mailto:support@onebiomed.com)

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## Contact us

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