Trophon EPR
User Manual

nanosonics

This manual must be read prior to operating the **Trophon EPR** to ensure correct procedures are followed and the specified disinfection results are achieved.

All technical specifications and systems approvals are found in Appendix I of this manual.

The written and graphic product descriptions in this manual are correct at the time of printing.

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PART A – INTRODUCTION AND INITIAL SETUP

SECTION A1: INTRODUCTION TO THE TROPHON EPR

For any operating, fault or maintenance queries, please contact your customer service representative.

A1.1 Training

It is the owner's responsibility to ensure that all users:

- Are trained as per the instructions contained in this manual to ensure safe operation.
- Are aware of the potential hazards in dealing with the disinfectant, detection methods and safety procedures associated with the device.

A1.2 User and Environment Profile

N.B. The following description is intended for general information only. For specific operating instructions, please refer to the relevant sections of this manual.

The Trophon EPR will be used in typical health care environments, under the control of health professionals such as:

- Sonographers
- General Practitioners
- Nurses
- Radiographers
- Specialist Doctors (e.g. cardiologists, obstetricians, gynaecologists)

In locations such as:

- Hospitals with centralized cleaning rooms
- Hospitals without specific cleaning rooms
- Radiology/Ultrasound sites with centralized cleaning rooms
- General practices and specialized doctors rooms without cleaning rooms

Intended Use:

- The sole purpose of the Trophon EPR is to high level disinfect validated ultrasound probes (see section B2.1) according to the specified processes outlined in this manual. It is not intended for any other use. Do **NOT** use this device for any application other than its expressed purpose.
- The Trophon EPR together with the Sonex-HL is a high-level instrument grade disinfectant
- The Trophon EPR is **NOT** intended to reprocess single use devices
- The Trophon EPR is **NOT** intended to pre-clean ultrasound probes
- The cable management system is an accessory designed for use with the Trophon EPR (see section A4.2)
- Chemical Indicator testing is required with every disinfection cycle. More information can be found in the Chemical Indicator Instructions for use, provided with the Chemical Indicator.

- The Trohpon Wall Mount and the Cart are accessories designed for use with the Trophon EPR; contact your customer service representative for more information.

Disinfection Process:

At the beginning of the cycle, the Trophon EPR creates an aerosol of concentrated hydrogen peroxide. This is quickly and evenly distributed over the surface of the probe, including very small crevices. This process provides thorough, high level disinfection of the shaft and the handle of the probe. The device breaks down the hydrogen peroxide into small amounts of water and oxygen and safely vents them into the external environment.

A1.3 Instructions for Use

- The Trophon EPR is designed to provide high-level disinfection of ultrasound transducers. The system uses Sonex-HL which is intended to be used exclusively with the Trophon EPR device.
- Sonex-HL is intended for use as a high-level disinfectant to be used exclusively with the Trophon EPR for the high-level disinfection of ultrasound transducers.
- The Trophon EPR is suitable for use in general hospital and health care facilities by trained personnel.
- The Trophon EPR system consists of a multiple use instrument combined with a single use disinfectant, delivered from a multi-dose cartridge.

Notes:
- 1) Sonex-HL is the product name of the Trophon Disinfectant.
- 2) The contact conditions listed above are fixed cycle parameters that are not able to be modified by the end user.

SECTION A2: IMPORTANT WARNINGS, LABELS and SYMBOLS

Failure to read the following sections may result in damage to the Trophon EPR, disinfectant cartridges or other equipment, or cause serious injury to the operator or other persons. If the device is used in a manner not specified by the manufacturer, the protection provided by the device may be impaired.

A2.1 Warnings

Hot Temperatures

- Risk of burns from the hot surfaces in the internal chamber. Do NOT touch these surfaces.
- Failure to remove the probe may result in damage to the probe. Remove the probe immediately after the cycle is complete.

Malfunctions

- Do NOT attempt to open the chamber door during a cycle or in the event of a power failure or system malfunction (see section B5.1).
- All repairs must be carried out by trained personnel ONLY. Do NOT attempt to repair or modify any part of the device. The Trophon EPR contains no end user serviceable parts.

Transporting the Device

- The device weighs approximately 38lb (17kg). Use safe lifting techniques as per your Occupational Health and Safety Lifting Guidelines for your institution.
- Do not move, relocate or transport the device if hydrogen peroxide is present; purge the device before moving or relocation.

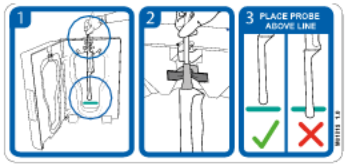
Electrical Device

- Equipment must be connected to an earthed power outlet. Ensure power cable supplied with the device is used.
- Spilled fluid can result in electrical shock. Do not allow any fluid to spill onto or around the device or immerse any parts of the Trophon EPR in liquid.
- Connect the device only to an electrical source with the proper voltage and frequency as specified in Appendix 1. If incorrect voltage is used, the device may be damaged when it is switched on.
- Attempting to open any component of the device to gain access to the internal mechanics may result in electrical shock.

Trophon Chemical Indicator

- ONLY to be used with the Trophon EPR. Do NOT use with non-approved devices.
- Do NOT use damaged and/or out-of-date indicators.
- Ensure indicator is red and not exposed before use.
- More information can be found in the Chemical Indicator Instructions for use, provided with the Chemical Indicator.

A2.2 Labels and Symbols

	Caution		Corrosive – 8
	Consult instructions for use		Oxidizer – 5.1
	Start (of action)		Single Use Only
	Fragile / Handle With Care		Warning: Hot Surface
	Do not disassemble		Dangerous Voltage
	Temperature Limits: 59°F-77°F		Keep Dry
	Batch Number		Expires (year and month)
	Keep Out of Direct Sunlight		Product Number
 Probe Guide			This Way Up

SECTION A3: OVERVIEW OF DEVICE FEATURES

A3.1 Front Panel and Back Panel

Figure 1

Front Closed

(Figure 1)

1. User screen: display messages and menu
2. Start button
3. Soft key buttons
4. Chamber door handle

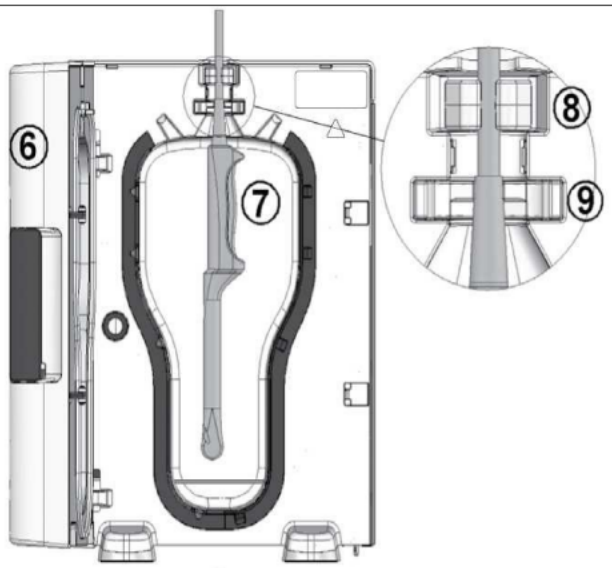
Figure 2

Back

(Figure 2)

5. Adjustable Feet (for levelling the device)

A3.2 Chamber (Figure 3)



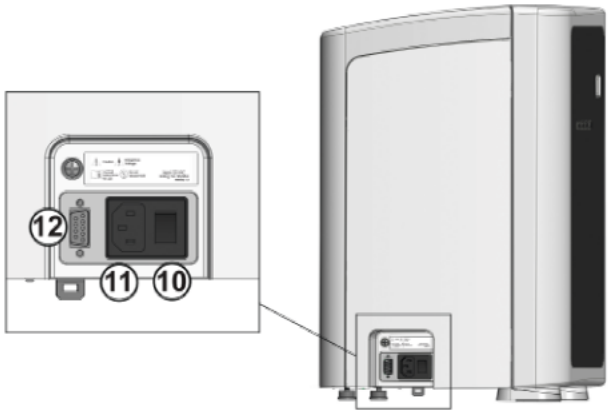
Chamber

(Figure 3)

6. Chamber door (opened)
7. Probe in correct position
8. Gland clamp
9. Gland seal

Figure 3

A3.3 Side Panels

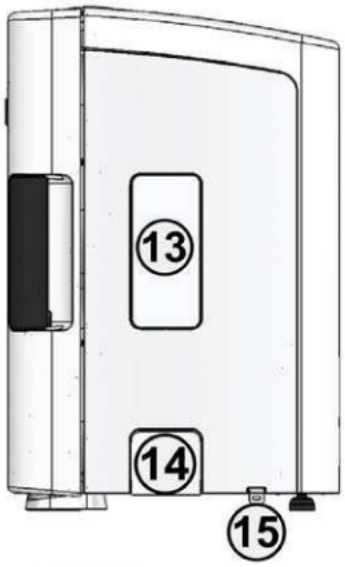


Left Side

(Figure 4)

10. Power switch
11. Power socket
12. Serial port (for authorised personnel only)

Figure 4



Right Side

(Figure 5)

Do NOT force open the cartridge door. Cartridge door will automatically open when required.

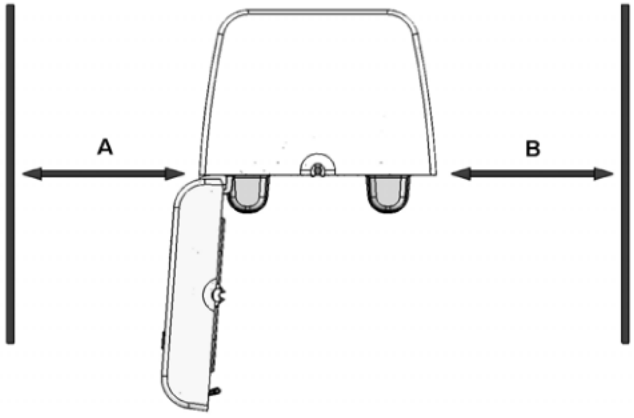
13. Cartridge replacement door
14. Waste container
15. Security lock port

Figure 5

A3.4 Positioning the device

N.B. Ensure the device is placed on a surface that can support the weight of the device (see Appendix 1).

Ensure the area around the device is free from other equipment and clutter. Positioning the Trophon EPR as shown below will ensure access to all features including the cartridge replacement system and for disconnecting the device.



Distance on each side of device:

A = 250mm (10 in)

B = 250mm (10 in)

(Figure 6 – not to scale)

Figure 6

SECTION A4: INSTALLATION GUIDE

A4.1 Positioning

1. For device positioning see section A3.4
2. Level the device by adjusting the back feet – turning feet clockwise or anti-clockwise (see Figure 2). Ensure feet are present at all times, and are not loose.
3. To secure the device in place and prevent unwanted removal from the bench, attach a security lock to the security lock port on the side of the device (see section A3.3 Right Side – Figure 5).

N.B. If the device needs to be relocated, see section B3.3 – Transportation

A4.2 Cable Management System Installation

1. Open the chamber door before mounting the basket to the device.
2. Peel back the protective strip from the double sided tape on the bottom of the basket (see Figure 7)
3. Align and slide the two hooks on the front of the basket into the slots in the device chamber (see Figure 8) until it cannot slide any further.
4. Push basket down on top of the device to secure it in place.

Figure 7

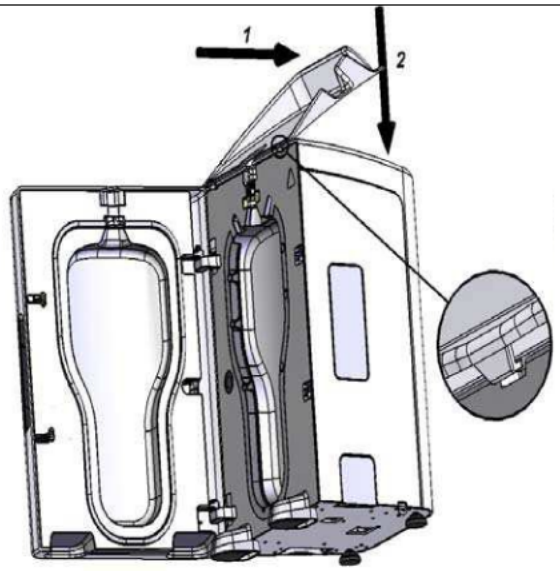


Figure 8

A4.3 Powering On

1. Attach the power cable supplied with the device to the device power socket. Equipment must be connected to an earthed outlet.
2. Switch on at the mains power
3. Turn on the power switch, located on the side of the device to 'ON'
4. Screen message: WARMING UP (see section A4.5).

A4.4 Basic Settings

Language

1. Press the soft key button underneath MENU on the screen
2. Using the soft key buttons under the LCD:
    - Scroll to SETUP using the buttons under the arrows and press OK
    - Scroll to LANGUAGE using the buttons under the arrows and press OK
    - Scroll to the desired language using the buttons under the arrows and press OK
    - The screen will now revert back to the menu screen

Date and Time

1. Press the soft key button underneath MENU on the screen
2. Using the soft key buttons under the LCD:
    - Scroll to SETUP using the buttons under the arrows and press OK
    - Scroll to SET DATE AND TIME using the buttons under the arrows
    - Set the date and time by using the button under NEXT to move through each set point and the arrows to scroll to the desired date and time
    - Once each set point is set press OK
    - The screen will now revert back to the menu screen
    - To change date and time format select SETUP using the buttons under the arrows and press OK
    - Scroll to CHANGE DATE FORMAT or CHANGE TIME FORMAT using the buttons under the arrows
    - Press OK once complete
    - The screen will now revert back to the menu screen

A4.5 Warm-up Cycle

1. Screen message: WARMING UP
2. This cycle prepares the device for operation
3. The warm up will begin automatically
4. During the warm up cycle some instructions may appear on the screen. Please follow these instructions, which may include:
    - Close chamber door
    - Load cartridge (Refer to section B1)
5. Warm up cycle can take approximately 40 minutes
6. When completed, the screen message will read: LOAD PROBE
7. The machine is now ready for use

N.B. It is recommended that the device remains switched on at all times to maximise the life of the disinfectant cartridge, unless the machine needs to be moved.

PART B – ROUTINE USE AND MAINTENANCE

SECTION B1: LOADING THE DISINFECTANT

B1.1 Disinfectant Specifications and Handling

Also read the Instructions for Use (IFU) leaflet enclosed with the Trophon Sonex-HL and also the Material Safety Data Sheet (MSDS) enclosed with the device.

Always wear disposable gloves when handling disinfectant cartridges.

N.B. Failure to follow specifications and handling instructions may compromize the effectiveness of the disinfection process and/or cause injury to the operator.

B1.2 Installing the Disinfectant Cartridge

1. Cartridge door will automatically open when cartridge needs replacing.
2. Screen message: LOAD CARTRIDGE or CARTRIDGE EMPTY. REPLACE CARTRIDGE NOW is displayed.
3. Press the button under YES to open the cartridge replacement door.
4. Do NOT insert empty cartridges into the device, this may cause damage.

N. B. Always check the expiration date on the cartridge before use. If cartridge has expired, dispose of as per local environment and government regulatory requirements. Do not attempt to open or load a damaged or distorted cartridge. Do not manually pierce the cartridge

5. Remove the cap from the cartridge and place the cartridge NECK FIRST into the holder.
6. Ensure the locator on the cartridge (see Figure 9 – ii) is aligned with the locator keys on the door (see Figure 10). Do NOT force the cartridge into the holder.

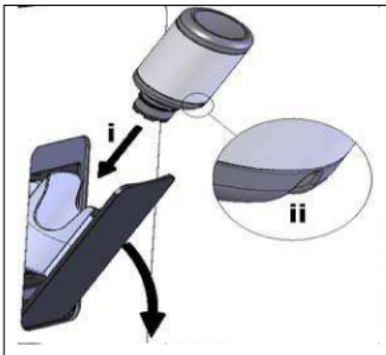


Figure 9

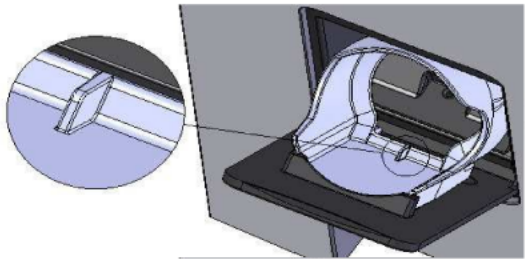


Figure 10

Figure 11

7. Rotate the cartridge until it drops into place and cannot rotate any further. When situated in place correctly, the bottom of the cartridge will be in line with the top of the holder (see Figure 11 – i).
8. Gently close the cartridge door. Do NOT use excessive force to close the cartridge door. It should click into place and lock (see Figure 11 – ii).
9. Following confirmation that a new cartridge has been installed, the cartridge door will automatically lock and will not reopen until the cartridge is empty (through use or purging).

N.B. Cartridges will last for approximately one month from date of installing, depending on usage and whether the device has been switched off. The device will automatically prompt to run a purge cycle if it detects that the disinfectant cartridge has been in the device for too long and has expired (see section B3).

B1.3 Spillage of Disinfectant

- Wear personal protective equipment appropriate for the spill (according to the Occupational Health and Safety Guidelines for your institution).
- Never return spills to original cartridges for re-use.
- Contain and clean-up the spill by placing spill control materials over the entire spill area.

B1.4 Customized Disinfectant Cartridges

- Use ONLY the Trophon Sonex-HL cartridges which are validated for use with the Trophon EPR
- Each cartridge is to be used ONCE. Do NOT refill or reuse cartridges

SECTION B2: ROUTINE HIGH LEVEL DISINFECTION CYCLE

The effectiveness of the device cannot be guaranteed if non-approved accessories are used. Do NOT use the Trophon EPR to disinfect non-approved devices or instruments.

B2.1 Validated Probes for use with Trophon EPR

For details of probes that are able to be used in the Trophon EPR refer to all of the following:

- 'Validated Probe List' (enclosed with Trophon EPR).
- Trophon website www.trophon.com (which can also be accessed through the Nanosonics website www.nanosonics.us)

- The manufacturer of ultrasound equipment for their recommendations and the most up-to-date list of validated disinfectants for use with their probes

N.B. Only validated probes should be placed in the Trophon EPR. All probes referred to on the Validated Probe List have been tested and validated according to the manufacturer's specifications.

B2.2 Preparing the Probe

The probe must be pre-cleaned and dried BEFORE the High Level Disinfection process can commence in the Trophon EPR.

N.B. Failure to clean and dry the probe may result in:

- high level disinfection will not be achieved during the Trophon EPR disinfection cycle
- contribution of additional residue on the probe

Refer to probe manufacturer's instructions for correct cleaning process.

B2.3 Positioning the Probe

N.B. Probe must be correctly inserted in the device for a cycle to run.

1. When the device is ready, screen message: LOAD PROBE
2. Open chamber door
3. The probe is held securely in the chamber by the use of two clamps, refer Figure 12(a).

   The probe has a short sleeve at the back of the handle, covering the electrical cable. This is referred to as the PROBE GLAND - Figure 12(a)

   Whilst wearing gloves, insert the Probe correctly as follows:

   - Hold the probe by its handle, press the top of the PROBE GLAND into the gland seal – Figure 13(a) and Figure 15
   - Press the probe's electrical cable into the cable clamp (at the top of the chamber)
   - Ensure the probe is straight and not touching the walls or the bottom of the chamber

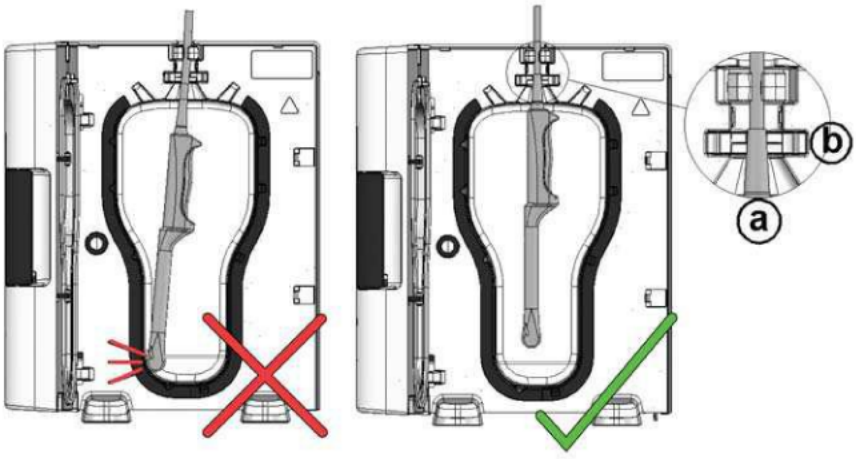


Figure 12

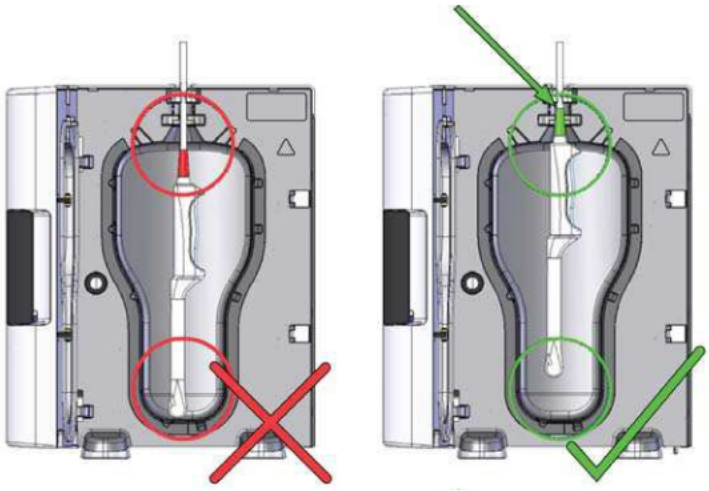


Figure 13

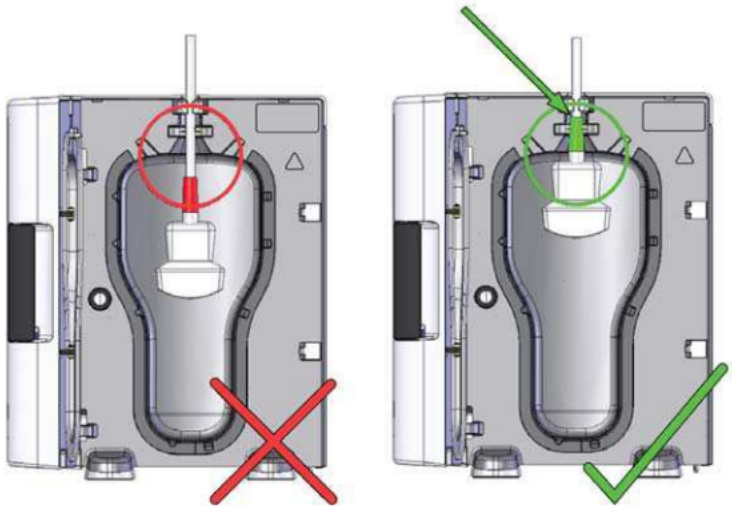


Figure 14

4. Additionally the probe shall be suspended with the tip located no lower than the line across the chamber (see Figures 13 & 14)

5. If a cable management system has been installed on your device, (see section A4.2), secure the external portion of the cable and connector by:

    - Placing the connector carefully inside the basket
    - Coiling the cable neatly and safely around the cable holder on the side of the basket assembly.

N.B. Incorrect positioning of the probe may result in:

- High level disinfection will not be achieved during the Trophon EPR disinfection cycle
- Excessive disinfectant residuals remaining on the probe surface
- Damage to the probe

B2.4 Installing the Chemical Indicator

A Chemical Indicator must be used for each disinfection cycle and can only be used once. After correctly loading the probe into the chamber, a chemical indicator shall be placed into the holder on the floor of the device chamber. Refer to the Chemical Indicator Instructions For Use (IFU).

B2.5 Closing the Chamber Door

- The door will automatically lock when closed
- If the door is not properly closed, screen message: CLOSE CHAMBER DOOR

B2.6 Disinfecting the Probe

Screen message: IS THE PROBE CLEAN AND DRY?

YES

1. If the probe has been pre-cleaned and dried according to section B2.2 above, press YES using the soft key button. The device will then check device readiness to perform a disinfection cycle. Once ready screen message: PRESS START TO BEGIN
2. Press the START button to initiate the cycle or CANCEL using the soft key button to unlock the machine and remove the probe

NO

1. If the probe has NOT been pre-cleaned according to section B2.2, select NO using the soft key button
2. Screen message: REMOVE AND CLEAN THE PROBE
3. Remove the probe and complete pre-clean as directed in section B2.2. Then follow instructions from section B2.3.
4. The progress of the disinfection cycle is indicated on the screen
5. Screen message: DISINFECTING

N.B. If mist is visibly escaping from the chamber, remain at a distance from the device until completion of the operating cycle, and until the mist stops. Do not

come into direct contact with the mist. Contact your customer service representative.

B2.7 Removing the Probe

It is important to wear gloves when handling probes prior and post disinfection cycle.

1. When the cycle has been successfully completed, the device will sound an audible alarm. Screen message: CYCLE COMPLETE REMOVE PROBE
2. Wear gloves. Check the Chemical Indicator colour change and refer to the Chemical Indicator IFU for further instructions.
3. Remove the used Chemical Indicator from the device and discard.
4. Remove the probe after the cycle is complete.
5. Wipe the probe with an absorbent, single-use, dry, lint-free cloth. Visually inspect the probe and ensure any peroxide residue is removed
6. Discard gloves
7. The probe is now ready to use.

B2.8 Sleep Mode and Shut Down Procedures

- If the device is not used for 120 minutes or a probe has been left inside the device for an extended amount of time, it will automatically enter sleep mode. To restart the device from sleep mode press RESTART. Screen message: SLEEPING- RESTART
- To obtain maximum use of disinfectant from each Sonex-HL cartridge, it is advised the Trophon EPR is left connected to power and switched ON at all times. The device will automatically switch into sleep mode if it is not used for extended periods in order to save power. Switching the system off for more than 24 hours will result in reduced usage from each Sonex-HL cartridge.

SECTION B3: PURGE CYCLE

The purge cycle removes any remaining disinfectant from the cartridge and the inside of the device and converts the Sonex-HL into oxygen and water. Oxygen is vented into the atmosphere. Water is collected in the waste container inside the device (maximum capacity 150ml).

B3.1 Reasons for Running a Purge Cycle

1. The device will automatically prompt the user to run a purge cycle if it detects that the disinfectant cartridge has been in the device for too long or if an error has been detected by the device that can not be rectified without a service call:
    - Screen message: CARTRIDGE EXPIRED
    - Using the soft key button press PURGE to initiate cycle and proceed to section B3.2.
2. A purge cycle must be manually initiated before lifting or moving the device. To do this:

- Select MENU using the soft key button
- Select PURGE.
- Screen message: CONFIRM PURGE
- Select OK using the soft key button
- Then proceed to section B3.2.

N.B. Once the purge cycle has been commenced it may be paused for a period of time but it cannot be cancelled.

B3.2 Running the Purge Cycle

N.B. Always wear disposable gloves when handling the waste container.

1. Ensure the empty waste container is fully inserted into the device
2. Purge cycle will commence automatically

N.B. The device will not purge if the waste container is not present

3. The purge cycle will typically take 35 minutes. Screen message: PURGING

N.B. Do NOT attempt to open the cartridge door during the purge cycle.

4. Purge cycle can be paused by pressing the soft key button under PAUSE. Screen message: PURGE PAUSED
5. To continue the cycle, press the soft key button underneath RESUME
6. When purging is complete screen message: REMOVE AND EMPTY WASTE CONTAINER
7. Remove the waste container from the device
8. Screen message: LOAD WASTE CONTAINER
9. Screen message: PURGE COMPLETE. REMOVE CARTRIDGE
10. The empty cartridge can now be removed – proceed to section B4.

B3.3 Transporting the Device

- Before transporting the Trophon EPR, you must purge the disinfectant and switch off the device at the power switch.
- The device may be chained to the bench, please unlock the security lock before moving the device.
- Do not move excessively or drag device across bench
- Keep device upright at ALL times even during transportation. The device should only be moved in an upright position.

SECTION B4: REMOVING and DISPOSING OF USED DISINFECTANT CARTRIDGES

IMPORTANT Cartridges are punctured at the top and on the side near the bottom when the cartridge door is closed and locked. A small amount of disinfectant may remain in the cartridge, even when it has been fully used. Follow the instructions carefully to avoid injury.

B4.1 Removing the Cartridge

1. Wear gloves
2. Screen message: REPLACE THE CARTRIDGE AND CLOSE CARTRIDGE DOOR

N.B. Cartridge door opens automatically. Do NOT use excessive force to pull down the cartridge door.

3. Lift the cartridge out by touching the areas exposed whilst the bottle is in the holder and avoid touching pierced area
4. Do NOT shake or change the orientation of the cartridge
5. Refer to section B1.2 for installation of new cartridge.

B4.2 Disposing of the Cartridge

Empty used cartridges should be disposed of in the nearest waste receptacle or according to the disposal guidelines of your Institution.

N. B. Do NOT insert empty cartridges into the device as this may cause damage to the device.

B4.3 Expired Cartridge

Follow procedures in your institution for the disposal of CORROSIVE or OXIDIZING materials.

B4.4 Deformed Cartridge

1. Turn disinfectant cartridge the right way up, to allow the cartridge to degas.
2. Contact your customer service representative and arrange for pick up.

SECTION B5: INCOMPLETE OR FAILED CYCLES

This section describes the most common situations in which a cycle has not been completed satisfactorily and the required actions to take (see also PART C – TROUBLESHOOTING).

B5.1 Mains Power Failure

If the mains power supply to the device is lost while in operation, the current cycle will not complete.

- If the probe is not urgently required, wait for power to come back on. As soon as power is restored the machine will safely recover. Follow the on screen prompts.
- Discard the used Chemical Indicator and replace with a new one. Re-run the disinfection cycle after waiting 3 minutes to avoid over elevating the temperature of the probe. The device will enter a warm-up cycle to enforce this.

- If the probe is urgently required, and power cannot be restored, follow section B5.4.

B5.2 Cycle Fault (during the cycle)

If a problem occurs during the cycle, a cycle fault will be detected.

- Screen message: DISINFECTION FAILED, REMOVING DISINFECTANT
- This cycle allows the probe to be safely removed after residual peroxide has been removed from the probe and the chamber.
- After completion of this cycle, the probe should be removed immediately to avoid damage to the probe. Do not attempt another cycle for at least 3 minutes to avoid overelevating the temperature of the probe. The device will enter a warm-up cycle to enforce this.
- In case of a repeated fault or serious malfunction, the screen message will display: ERROR – CALL SERVICE PERSONNEL. Contact your customer service representative immediately citing the error message shown on the LCD display.

N.B. Do NOT attempt to use the device.

B5.3 Failed Cycle (at the end of the cycle)

If a cycle has not been completed to required specifications, a failed cycle will be detected.

1. Screen message: DISINFECTION CYCLE FAILED. UNLOCK. A beep will be heard.
2. Press the soft key button underneath UNLOCK to unlock the chamber door
3. Screen message: DISINFECTION CYCLE FAILED. REMOVE PROBE
4. Remove probe immediately and do not attempt another cycle for at least 3 minutes to avoid overelevating the temperature of the probe. The device will enter a warm-up cycle to enforce this.

N.B. The probe is **NOT DISINFECTED** and **CANNOT** be reused until it has completed a successful disinfection cycle or been disinfected by an alternative method.

B5.4 Manual Door Lock Override

Use ONLY in EXCEPTIONAL circumstances when the probe is locked in the chamber and must be urgently retrieved for use.

WARNING: THERE MAY STILL BE DISINFECTANT IN THE CHAMBER and CHAMBER SURFACES MAY STILL BE HOT. Personal protective equipment such as gloves should be worn to avoid contact with disinfectant.

By turning off the power and turning it back on the device, will attempt to recover. At this time if the probe still cannot be removed then the following may be undertaken:

1. Turn off device
2. Insert the tip of a screwdriver into the slot behind the chamber door handle gently until it stops. (see Figures 15 and 16)
3. Lift the screw driver in an upwards motion
4. The door will unlock and the probe can be removed.

N.B. The probe is **NOT DISINFECTED** and **CANNOT** be reused until it has completed a successful disinfection cycle or been disinfected by an alternative method.

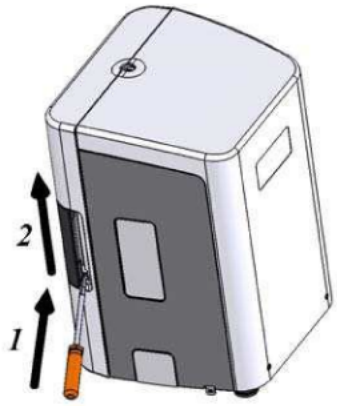


Figure 15

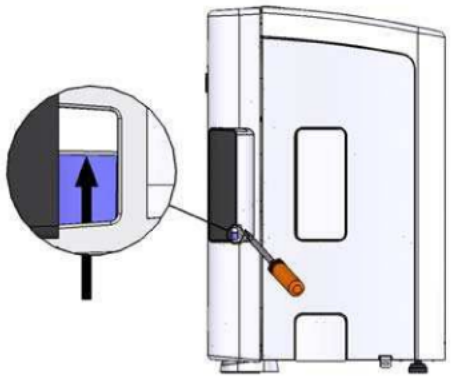


Figure 16

SECTION B6: ROUTINE CARE AND MAINTENANCE

B6.1 Daily Clean-Up

1. Wipe the chamber with a damp cloth when cool
2. Close the chamber door
3. To clean the outside of the device, wipe with a soft damp cloth. Do NOT submerge the device, or pour liquids over the device
4. Use warm mild soapy solution to clean the outside covers of the device, taking care not to have liquid come in contact with power socket (see Figure 4).

N.B. To obtain maximum use of disinfectant from each Sonex-HL cartridge, it is advised the Trophon EPR is left connected to power and switched ON at all times. The device will automatically switch into sleep mode if it is not used for extended periods in order to save power. Switching the system off for more than 24 hours will result in reduced usage from each Sonex-HL cartridge.

B6.2 Service

Once the service interval of 12 months or 5000 cycles is displayed on the screen, please contact your customer service representative to arrange a service for the device.

SECTION B7: DISPOSAL OF DEVICE

B7.1 Device Disposal

When the device is decommissioned, please contact your distributor or Civic Office to dispose it to the applicable collection point for the recycling of electrical and electronic equipment.

PART C – TROUBLESHOOTING

The following table will enable a user to diagnose basic problems and implement a solution that may enable the device to resume operation. If a probe is present and you need to retrieve it urgently, see section B5.4.

If the problem persists, contact your Nanosonics representative.

Symptom	Check for the following
1. There is no power to the device 2. The screen is blank	• The device is plugged in • The correct power cable for the region is used • The power is switched ON at the wall outlet • The power switch on the device is set to ON
3. The chamber door will not open	• There is power to the device • Follow screen messages for instructions • Any cycle (purge or disinfect) is complete • Chamber door handle can be completely opened
4. The chamber door will not close	• Follow screen messages for instructions • The probe is validated for use in the device • The probe Is loaded correctly • Door lock position: if in the 'locked' position, the door will not close. To check, try opening the handle as if opening the chamber. If the handle cannot be turned, the door is in the locked position – see section B5.4
5. The cartridge door does not open	• There is power to the device • Follow screen messages for instructions • The cycle (purge or disinfecting) is complete • The waste container is empty and fully inserted
6. The cartridge door will not close	• Follow screen messages for instructions • Correct cartridge type: Trophon Sonex-HL • Cartridge is correctly positioned using the locator keys • Cartridge lid has been removed
7. The probe will not sit correctly in the chamber	• The probe is validated for use in the Trophon EPR • The probe is loaded correctly
8. The cycle will not start	• There is power to the device • Follow screen messages for instructions • The probe is loaded correctly • The chamber door is closed • If at the 'Clean and dry probe screen' and the YES button will not register, contact your customer service representative • If the screen reads READY and the start button will not respond, contact your customer service representative
9. The device is beeping	• Follow screen message for instructions • Probe inside the device which needs to be removed
10. Liquid is leaking from the device	Warning: Any fluid leaking from the device may contain hydrogen peroxide. If liquid or mist is seen coming from the device at any time: • Do not come into contact with the mist or liquid • Ensure area is well ventilated • Allow the device to complete the cycle • Turn off the device and remove the power cord • Contact your customer service representative

PART D – SERVICE AND WARRANTY

If you have any questions or concerns regarding the Trophon EPR or disinfectant supplies, contact your GE Health Care representative.

The Trophon EPR has a comprehensive warranty against defects in material and workmanship for 12 months from the date of delivery.

A warranty registration form is enclosed within this manual. Complete the warranty registration form including the date at the time of initial set-up and return to your customer service representative. If you have not received a warranty registration form or would like to obtain further information about post warranty contracts please contact your GE Health Care representative immediately.

Service Schedule: To ensure correct operation, the Trophon EPR must be serviced by appropriately trained service personnel. Service Schedule is every 12 months or at every 5000 cycles; this will be indicated by the device. Screen message: DEVICE SERVICE DUE at the start-up of the device. This message will be displayed weekly on the screen until a service is performed. Service intervals can also be accessed via the system information. When required, a usage log can be provided by your service centre. Contact your GE Health Care representative to obtain a print out for your records.

N.B. Unauthorized modification to the Trophon EPR or service by someone other than appropriately trained service personnel will void your warranty.

APPENDIX 1: TECHNICAL SPECIFICATIONS

Electrical Specification	• Rated input voltage: 120V AC • Rated input current: 5Amp, 50/60Hz • Input IEC • Output DB9 (for service use ONLY) • Equipment must be connected to an earthed outlet
Environmental Specification	• Operating temperature range: 63^{0}F - 80^{0}F (17-27^{0}C) • IP20
Physical Characteristics	• Weight of device: 38 lb (17kg) • Dimensions of device: 19.3in high x 13.6in wide x 13.6in depth (490mm high x 345mm wide x 345mm depth)
EMC Compliance	This device has been tested and found to comply with the limits for emission requirements (Electro-Magnetic Interference) pursuant to EN61000-4-2; 2005 & EN 61000-4-3 : 2006.

Notes

Notes

Warranty Registration Form

This REGISTRATION FORM must be completed in full and returned to your GE Health Care customer service representative upon installation of the Trophon EPR.

Terms

Nanosonics Limited warrants to the customer that Nanosonics' products are free from defects in material and workmanship that materially affect the functionality of its products under normal use and service for a period of 12 months commencing upon the date of purchase.

Conditions

Warranty repairs will not be provided if, upon assessment by GE Health Care's service representative, the problem resulted from externally caused damage, if the product was used outside the product's specification, faulty caused by an unauthorized dealer or service centre or from the use of non-approved consumables and accessories. This warranty applies to the Trophon EPR only; the warranty does not cover the replacement of used Sonex-HL or of parts which need periodic replacement during the life of the product as a result of the ordinary use made of them, unless the item itself is defective. Please contact your GE Health Care customer service representative for any further information about the warranty or post warranty details. Please complete all details on this form to ensure registration is valid for this warranty.

Please retain the top half of this form

Name: _____ **Email:** _____

Phone: (____)_____ **Mobile:** _____ **Fax:** _____

Contact Address: _____

_____

_____ **County:** _____ **ZIP:**_____

Device model: _____

Serial No: _____ **Date of purchase:** _____

Invoice No: _____

I understand and accept that the Trophon EPR is warranted against defects in material and workmanship for **12 months** from the date of purchase.

I also understand that unauthorized modification to the above product or service by someone other than GE Health Care approved customer service personnel will void the warranty.

Signature: _____ **Date:** _____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