



# RespiPatient®



## User's Manual

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## 1 Operator Safety

To insure correct and effective use of RespiPatient, read and follow all instructions, WARNINGS, and CAUTION statements in this manual. If the product is not used as instructed, the safety protection provided may be impaired.

### 1.1 Warnings and Caution Statements

#### **WARNING !**

Indicates a potentially harmful condition that can lead to personal injury.

#### **CAUTION !**

Indicates a condition that may lead to equipment damage or malfunction.

**NOTE:** Indicates points of particular interest or emphasis for more efficient or convenient operation.

### 1.2 Intended Use

IngMar Medical's RespiPatient is a specialized respiratory manikin with an anatomically correct airway and chest structure. RespiPatient is intended to be used for demonstrations, in-services, and training respiratory staff in skills such as resuscitation and comprehensive ventilator management. RespiPatient is part of IngMar Medical's RespiSim® system, a platform for respiratory care instruction with time saving features for instructors to provide higher quality and more consistent training content, higher skill levels for students, and, ultimately, better patient care.

#### **WARNING !**

Always follow ventilator manufacturers' instructions and recommendations regarding use and operation of ventilator equipment in conjunction with RespiPatient. IngMar Medical, Ltd. does not recommend any specific ventilator and no portion of these instructions shall be construed as doing so.

#### **WARNING !**

##### **- NOT FOR CLINICAL USE -**

RespiPatient is not intended for the purpose of assisting in clinical decisions regarding actual patients.

### 1.3 General Precautions

#### **CAUTION !**

Electrical Supply: Connect device only to a **properly grounded** wall outlet providing

**100 - 240 V AC, 50 - 60 Hz.**

#### **CAUTION !**

Do not operate the RespiPatient Interface box when it is wet due to spills or condensation. Never sterilize or immerse the device in liquids.

#### **CAUTION !**

Do not operate the RespiPatient Interface box if it appears to have been, opened, dropped, or damaged.

## 2 Introduction

### 2.1 Overview

RespiPatient is a specialized respiratory feature-centered torso manikin with bilateral chest rise and intubation-grade normal and difficult airway. In addition, it allows for training of needle decompression (pneumothorax), chest tube insertion, as well as cricothyrotomy and tracheotomy procedures.

RespiPatient enables you to train the full range of airway management and CPR skills with anatomically correct airway, rib cage, three-layered tissue, “real feel” skin covering, and realistic chest rise. Replaceable tissue sets allow each learner a life-like and unique experience for training.

RespiPatient consists of a torso manikin that connects to the RespiPatient Interface box. The RespiPatient Interface box drives the features of the RespiPatient manikin using IngMar Medical's ASL 5000 Breathing Simulator to provide high-fidelity, spontaneously breathing lungs.

### 2.2 Available Options

Options that can be added to the base system include:

- Mobile Cart: Integrates ASL 5000 and RespiPatient for in-situ simulation training, wherever a ventilator is located.
- RespiScope™ Advanced Auscultation: Enables realistic practice and mastery of auscultation skills critical for diagnosis. Lung, heart, and bowel sounds are provided. Consult the RespiScope User's Manual for operation of RespiScope and the RespiScope software.

### 2.3 Features

#### 2.3.1. RespiPatient Features

- Cardiopulmonary resuscitation: life-like recoil during chest compressions
- Intubation – orotracheal, nasotracheal, combitube, LMA placement, difficult airway (tongue edema)
- Bag-valve-mask ventilation techniques
- 

- Tension pneumothorax
  - Identification of tracheal deviation and jugular vein distension
  - Right or left tension pneumothorax
  - Needle decompression (with familiar “hiss” sound)
- Chest tube insertion
  - Recognition of correct position in the 5<sup>th</sup>, 6<sup>th</sup>, and 7<sup>th</sup> intercostal space
  - Blunt dissection through chest wall
- Surgical skills
  - Cricothyrotomy
  - Tracheotomy
- CO<sub>2</sub> production for capnography
- Torso manikin easier to move and store than full body manikin

**NOTE:** Mouth-to-mouth resuscitation is NOT recommended on RespiPatient as the airway is not designed to handle hygienic precautions for use by multiple students.

#### 2.3.2. Lung Features

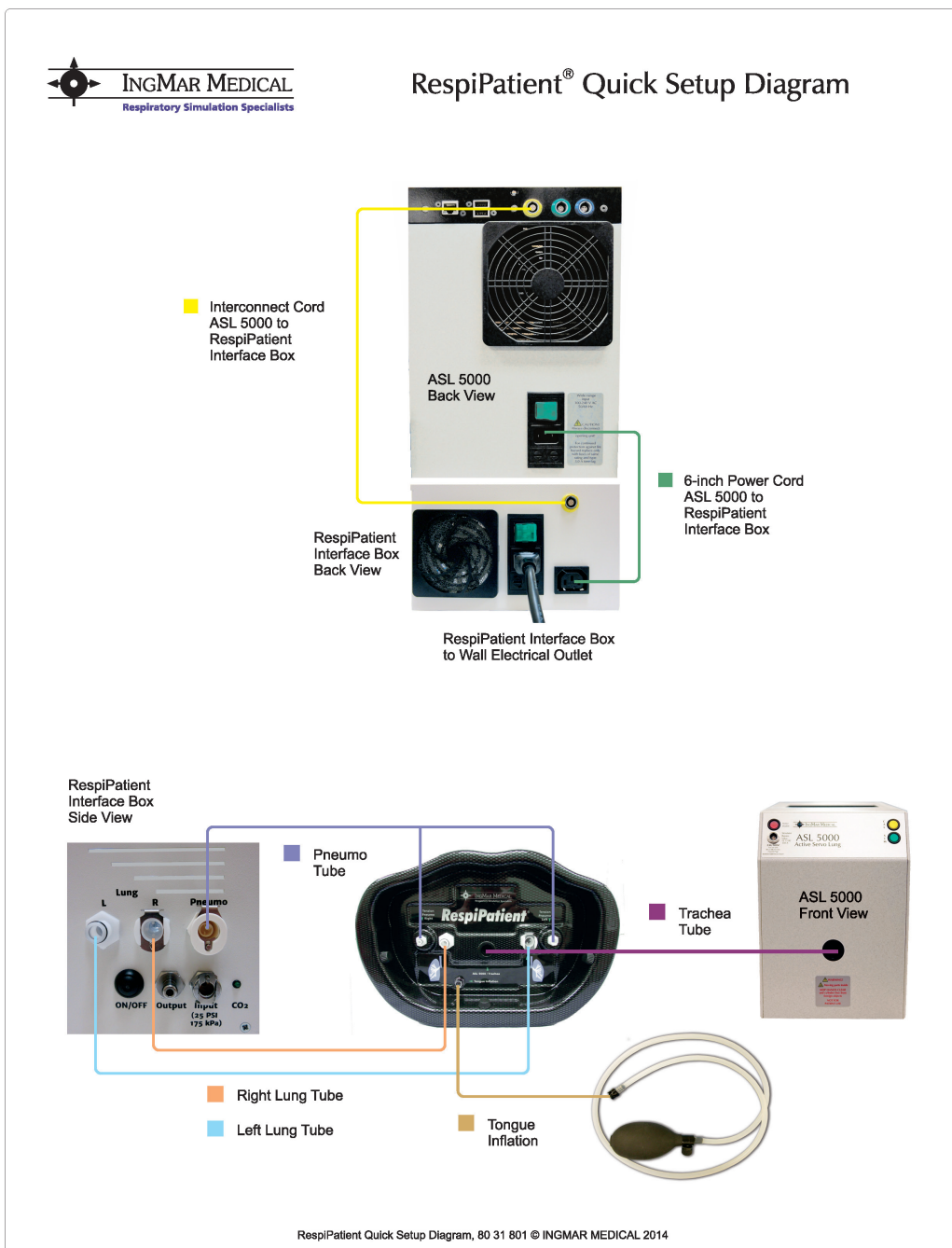
At the core of RespiPatient is the spontaneously breathing ASL 5000 Breathing Simulator—the world's most sophisticated breathing simulator.

- Spontaneous breathing controls: Examine patient-ventilator interaction with a spontaneously breathing patient including coughs, apnea, active exhalation, playback of actual patient recordings – even snoring!
- Disease state modeling: Quickly access patient models as a basis for your particular situation or create your own unique scenarios. You can always change patient parameters “on the fly” when needed.
- Reproducible patients: Ensure consistent instruction and skills assessment.

For further information on the operation and use of the ASL 5000 Breathing Simulator, please refer to the ASL 5000 User's Manual.

## 3 RespiPatient Setup

### 3.1 Quick Setup Diagram



**Figure 3-1** RespiPatient Quick Setup Diagram



## 3.2 Step-by-Step RespiPatient Setup

To connect RespiPatient, the RespiPatient Interface box, and the ASL 5000 Breathing Simulator, start by placing RespiPatient, the RespiPatient Interface box and the ASL 5000 on a table in close proximity to each other. Stack the ASL 5000 on top of the RespiPatient Interface box by placing the ASL 5000 feet into the orange cups on top of the Interface box.

### 3.2.1. Manikin to Interface Box

#### Lung Connections

##### Left Lung Connection

Insert the female end of a lung tube into the Interface box Lung port labeled "L." Insert the male end of the same lung tube into the RespiPatient Left Lung port.



**Figure 3-2** Interface Box - Left Lung



**Figure 3-3** RespiPatient Left Lung Connection

##### Right Lung Connection

Insert the male end of a lung tube into the Interface box Lung port labeled "R." Insert the female end of the same lung tube into the RespiPatient Right Lung port.



**Figure 3-4** Interface Box- Right Lung



**Figure 3-5** RespiPatient - Right Lung

#### Pneumothorax Connection

##### Interface Box Pneumo Connection

Insert the single-connector end of the Pneumothorax tubing into the Interface box port labeled "Pneumo."



**Figure 3-6** Interface Box Pneumo Connection

## RespiPatient Left Pneumo Connection

Insert the clear tubing end into the port labeled “Tension Pneumo Left.” Then turn the connector slightly to the right (clockwise) to snap it into place.



**Figure 3-7** Left Pneumo Connection

## **RespiPatient Right Pneumo Connection**

Insert the black tubing into the port labeled “Tension Pneumo Right.” Then turn the connector slightly to the right (clockwise) to snap it into place.



**Figure 3-8** Right Pneumo Connection

## **3.2.2. Manikin to ASL 5000 Connections**

### **Trachea Connections**

#### RespiPatient Trachea Connections

Insert the elbow end of the trachea tube into the port labeled “ASL 5000/Trachea” as shown.



**Figure 3-9** RespiPatient Trachea Connection

#### ASL 5000 Trachea Connection

Insert the other end of the trachea tube into the front panel of the ASL 5000 as shown.



**Figure 3-10** ASL 5000 Trachea Connection

### **Power Connections**

#### RespiPatient Interface box to ASL 5000 Short Power Cord Connection

Connect one end of the 6” Power Cord into RespiPatient Interface box power socket as shown and the other end into the ASL 5000 power socket.



**Figure 3-11** Interface box to ASL 5000 Short Power Cord Connection

### RespiPatient Interface box Power Connection

Connect the power cord to the RespiPatient Interface box as shown. Insert the other end into an AC power source.



**Figure 3-12** Interface Box Power Connection

### Interconnect Cable

Connect one end of the interconnect cable into the back of the RespiPatient Interface box and the other end of the cable into the back of the ASL 5000 as shown.



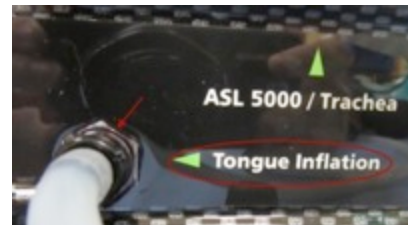
**Figure 3-13** Interface Box



**Figure 3-14** ASL Interconnect Cable Connection on ASL 5000

### **3.2.3. Tongue Inflation Tubing**

Insert the connector end of the tongue inflation tube into the manikin in the black connector labeled "Tongue Inflation" as shown. Then turn the connector slightly to the right (clockwise) to engage.



**Figure 3-15** RespiPatient Tongue Connection

### **3.2.4. Bypass Mode**

To operate RespiPatient in stand-alone mode without the ASL 5000, connect the Bypass Tubing as shown in Figure 3-16.



**Figure 3-16** Bypass Mode

## 4 Operation

### 4.1 How It Works

The ASL 5000 Breathing Simulator sends signals to the RespiPatient Interface box driving RespiPatient's chest rise, venous engorgement, tracheal deviation, and tension pneumothorax.

The ASL 5000 serves as the simulated lungs for RespiPatient using the ASL 5000 trachea port connection to the base of the manikin, through the manikin's trachea, and the manikin's mouth. This means that the air flowing in and out of the chest rise bags in the manikin are completely separate from the "breathing" air flowing through the trachea.

### 4.2 Preparing RespiPatient for Use

- Remove RespiPatient from the black carrying case.
- Ensure that all components are present and the tissue sets are connected and secure.
- Place RespiPatient on its back.
- Please ensure all airway devices are prepared to the manufacturer's recommendations and instructions. Before insertion of any device, generous amounts of lubricant should be used to cover the surfaces in contact with the airway.

### 4.3 Starting Up

**NOTE:** Because the ASL 5000 controls the Interface box, first connect the RespiPatient Interface box and then follow these steps in the order listed to run the full system properly. For further information on the ASL 5000 operation in the steps below, consult the ASL 5000 User's Manual.

To start operation of RespiPatient with the ASL 5000, follow these steps:

- Use the green switch on the back of the ASL 5000 to turn on power to the ASL 5000. The small blue LED inside the IngMar Medical logo on the front panel will indicate that power is on
- Use the green switch on the back of the RespiPatient Interface box to turn on power to

RespiPatient. Note that the light in the switch will illuminate indicating that power is on - you will not hear any sounds.

- Wait for the red indicator light on the front of the ASL 5000 to turn off.
- Start the ASL 5000 Software as directed in the ASL 5000 User's Manual (clicking on the ASL 3.5 icon on the computer's desktop).
- Connect to the ASL 5000 simulator based on the user-defined connection type (Ethernet or USB/Serial).

### 4.4 Operating RespiPatient

#### 4.4.1. Chest Rise

Activate RespiPatient's chest rise by running a simulation from the ASL 5000 or RespiSim software. Once a simulation is running, the "Pump" LED on the front of the RespiPatient Interface box illuminates and the manikin's chest rises and falls.



**Figure 4-1** Pump On/Off LED

Resistance, Compliance, and Muscle Effort (if applied) in the patient model used in the simulation directly affects the visual chest rise. The amount of chest rise seen is directly related to the volume waveform shown in the ASL software's Central Run-Time window or Run Time Home window.

For example:

- Greater effort with high compliance and low resistance will result in a larger chest rise.
- Smaller effort with lower compliance and higher resistance will result in a smaller chest rise.
- For a sedated patient receiving controlled breaths from an ICU ventilator, chest rise is, in the same way, a function of breath size.



The system also has the ability to provide bilateral (individual, left/right) chest rise if using a dual-lung model with varying left and right lung compliance and resistance settings. Please see the ASL 5000 Breathing Simulator User's Guide for information on building a lung model.

## 4.4.2. Tension Pneumothorax, Venous Engorgement, Tracheal Deviation

RespiPatient provides the ability to simulate a combination tension pneumothorax, venous engorgement, and tracheal deviation. These inserts are located in the second intercostal space at the mid-clavicular line.



**Figure 4-2** Needle Decompression

Each insert is composed of durable tissue capable of handling 30+ needle punctures. The venous engorgement and tracheal deviation are internal to the manikin and connected to the same air line that fills the needle decompression sites. When the user initiates the inflation of these regions, the following changes occur:

- The needle decompression insert inflates.
- A pillow inside the manikin inflates causing the trachea to shift (tracheal deviation).
- A pillow in the neck inflates, creating a bulge in the neck (venous engorgement).

Piercing the needle decompression site will result in a "hissing" sound and will deflate all pillows to "stabilize" the patient.

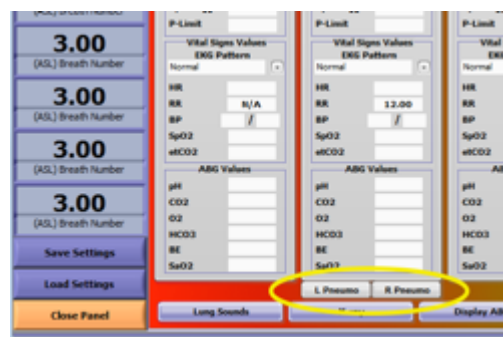
There are two methods available for the user to force these cavities to inflate:

- The first method is to manually press the Pneumo L or R buttons on the RespiPatient Interface box.



**Figure 4-3** Manual Interface Box Pneumo Activation

- The second method is to activate the pneumothorax through the RespiSim software. Refer to the RespiSim Manual for instructions on running a simulation with a tension pneumothorax, venous engorgement, and tracheal deviation.



**Figure 4-4** RespiSim Pneumo Activation

When the pneumo button (real or virtual) is engaged, the three cavities will inflate to a pressure of approximately 70 mbar. Sensors in the RespiPatient Interface box prevent over-inflation of the three cavities. If an unintentional inflation occurs, the user can release the air within the cavities by removing the needle decompression insert and reinserting the air tube.



**Figure 4-5** Removing the Needle Decompression Insert



Figure 4-6 Remove and Reinsert Air Tube

#### 4.4.3. Swollen Tongue

RespiPatient's tongue can be inflated to simulate a swollen tongue. This creates increased resistance in the airway as well as making it difficult to intubate the manikin. To initiate the tongue inflation, shut the relief valve (turn clockwise) on the connected tongue inflation bulb and squeeze the bulb enough to see the jaw adjust. To relieve pressure in the tongue, open the valve (counterclockwise) on the tongue bulb.



Figure 4-7 Inflatable Tongue

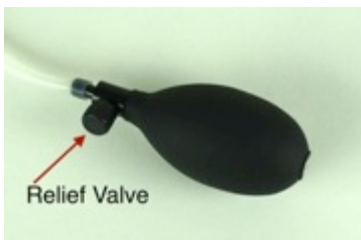


Figure 4-8 Tongue Bulb Relief Valve

#### 4.4.4. Breakaway Teeth

The breakaway teeth provide a good representation of the fragility of human teeth. RespiPatient's teeth attach to the gums with a small plastic tether. If the teeth break off during an unskilled attempt at intubation, they remain tethered to the upper gums. Reset them by pressing them back into position in the upper gums.



Figure 4-9 Breakaway Teeth

#### 4.4.5. Intubation

RespiPatient provides the most anatomically correct airway in the industry. Intubation training can be performed through the mouth or either nostril. See the Ancillary Materials specifications at the end of this manual for recommended sizes.

RespiPatient can be used to train on any ventilator. The connection is made either with any invasive airway management device or with a mask, for non-invasive ventilation, just like with a real patient.

#### 4.4.6. Chest Drain

Each side of RespiPatient incorporates a removable chest drain cavity, which can be filled with liquids to represent a hemothorax or pleural effusion. Incisions can be made through the fifth, sixth, and seventh intercostal spaces. The cavity insert is a consumable part that will require replacement after incisions are made.

#### 4.4.7. Cardiopulmonary Resuscitation

The anatomically correct chest structure allows for easy identification of all anatomical landmarks. RespiPatient can be adjusted for head-tilt, chin lift, and jaw thrust in order to prepare the patient for proper resuscitation training and simulation. The chest cavity has realistic recoil during compressions as well.

#### 4.4.8. Carbon Dioxide Infusion

The RespiPatient Interface box provides the ability to control carbon dioxide flow into the patient airstream. The system supports a range of 0 to 600 mL/min. Control the flow from the ASL 5000 software on the Instructor Dashboard. Access the Instructor Dashboard from the RespiSim Debrief window. Consult the RespiSim Manual for more information.

RespiPatient includes two connectors for input and output of the CO<sub>2</sub> stream. **The CO<sub>2</sub> source is not included** and must be limited to 25 PSI (175 KPa) for proper operation. CO<sub>2</sub> pressures exceeding this limit may result in inaccurate flows into the airstream.



**Figure 4-10** Interface Box Side Panel

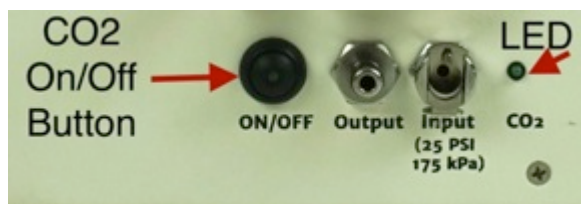


**Figure 4-11** CO<sub>2</sub> Output Connector



**Figure 4-12** CO<sub>2</sub> Input Connector

The push button switch on the side of the RespiPatient Interface box drives the CO<sub>2</sub> flow.

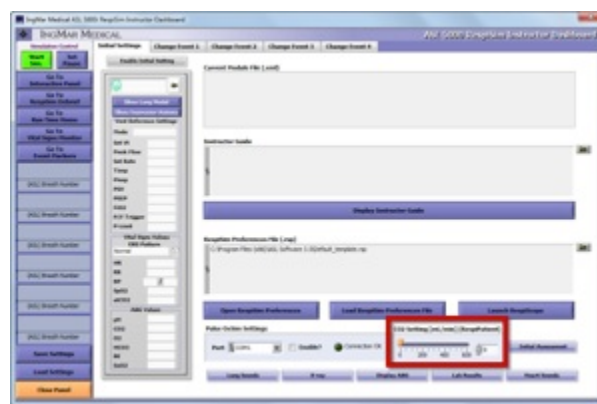


**Figure 4-13** CO<sub>2</sub> On/Off Switch and LED

The green LED indicates when the flow has reached user input settings as follows:

- **When the LED is a solid green:** The CO<sub>2</sub> flow is within the set value range
- **When the LED is toggling on and off:** Either the CO<sub>2</sub> flow has not yet reached the set value or the external CO<sub>2</sub> supply is too low and the CO<sub>2</sub> source should be replaced.

To adjust the CO<sub>2</sub> flow from the ASL 5000 software, access the RespiSim software, and load a preconfigured module. From the Instructor Dashboard, adjust the "CO<sub>2</sub> Settings [mL/min] (RespiPatient)" slide-bar, or place a desired value into the input box. Please note that setting increments are in steps of 10 mL/min.



**Figure 4-14** CO<sub>2</sub> Settings in RespiSim

#### 4.4.9. Cricothyroidotomy and Tracheostomy

RespiPatient provides allows for performance of needle and surgical cricothyroidotomy and percutaneous tracheostomy. RespiPatient has anatomically accurate simulated cricoid, laryngeal cartilages, and palpable tracheal rings, allowing easier identification of the correct landmarks to begin needle and surgical cricothyroidotomy and percutaneous tracheostomy procedures.

The system also includes replacement neck skin and larynx membrane inserts. Membrane inserts provide life-like resistance for the cricothyroid membrane and tracheal cartilages. When performing these procedures, make sure to reseal the airway with the included Airway Sealing Tape before the next use.



**Figure 4-15** Cricothyroid Membrane & Tracheal Cartilages



## 5 Maintenance

### 5.1 Service and Calibration Intervals

There are no calibration or servicing requirements for RespiPatient or RespiPatient Interface box.

For details about service needs or extended warranty plans, please contact IngMar Medical Customer Care at:

1-800-683-9910, or

+1 (412) 441-8228 ext. 107

or e-mail to [info@ingmarmed.com](mailto:info@ingmarmed.com).

### 5.2 Cleaning and Storage

- Store RespiPatient in clean, dry conditions away from heat and direct sunlight; avoid contact with metals, solvents, oils or greases, and strong detergents.
- Please ensure that the airway is cleaned after use as necessary. When appropriate, wash the RespiPatient airway with warm soapy water until all visible foreign matter and residue is removed.

#### CAUTION !

Prior to cleaning the RespiPatient Airway, be sure that the trachea line to the ASL 5000 is disconnected to prevent introducing liquids into the ASL 5000.

- When cleaning the airway, use a small soft bristle brush (approximately 1/2 inch or 12.5mm in diameter). Gently insert the brush through the airway, taking care not to damage the material. Extra care must be taken when cleaning around the vocal cords.
- Carefully inspect the device to ensure that all visible foreign matter has been removed.
- The head and neck skin of RespiPatient is made from durable and very elastic polymer material. It can be cleaned using a lightly soapy, damp cloth. Please do not use detergents or cleaning agents on the skin material.
- During chest drain procedures with the addition of fluid (blood-like fluid) in the

cavity, the model may experience some residual deposits. These can be cleaned using warm soapy water and dried using a cloth.

#### CAUTION !

**Please DO NOT USE any of the following when cleaning RespiPatient:**

- Germicides, disinfectants, or chemical agents such as glutaraldehyde (e.g. Cidex®).
- Ethylene oxide, phenol-based cleaners, or iodine-containing cleaners.

Such substances are absorbed by RespiPatient materials, resulting in exposing the user to unnecessary risk and possible deterioration of the device.

**Do not use a device that has been cleaned with any of these substances.**

### 5.3 Replacing Tissue Inserts

The needle decompression and chest drain inserts are designed for multiple uses. RespiPatient comes ready for use with needle decompression, chest drain, and neck skin inserts in place. After exhausting the use of the inserts, they should be replaced as described below.

To obtain replacement tissue inserts, refer to Section 8 – Consumables.

#### 5.3.1. Replacing Needle Decompression Inserts

Failure of the needle decompression insert will be evident when the air tightness of the manikin's decompression insert begins to decrease and there is a lack of "hiss" when performing the needle decompression maneuver. The insert may work successfully for more than 30 needle incisions. Conduct regular inspections to ensure optimal performance.

To replace the needle decompression inserts:

- Remove the outer chest skin to gain access to the needle decompression insert site.
- Gently remove the insert away from the slotted rib structure. This will reveal the internal tubing.

- Slowly separate the tubing from the needle decompression insert to free the insert.
- Dispose of the insert safely.
- Inserts are labeled L for left and R for right for easy identification.
- Insert the tubing end into the hole. Ensure the tubing end is inserted all the way to the last barb.
- Reinsert the tissue set into the slotted rib structure. A small amount of lubrication can be added to reduce the friction upon entry.
- Push the tubing inside the chest cavity.
- Re-assemble the chest skin and tuck back into position.
- Make sure the tissue set is flush with the outer skin and is positioned correctly in relation to the ribs.
- Take time to ensure the tissue inserts are inserted correctly as a faulty connection will affect the operation of the feature.

### 5.3.2. Replacing Chest Drain Inserts

There are two options for the chest drain replacement tissues: economy or premium.

RespiPatient comes equipped with the economy option, which consists of one solid layer of special silicone blend. This is the more economical option for training e.g. for use in ATLS courses.

The premium product provides a three-layered tissue representing; skin, fat tissue and muscle. Each of these layers are pigmented to the applicable color anatomically and provide a realistic feel and touch.

The insert position, which is between the ribs, allows for realistic palpations of the correct intercostal landmarks, chest tube insertion can be carried out in the 5<sup>th</sup> / 6<sup>th</sup> / 7<sup>th</sup> intercostal space. The inserts provide the option of inserting fluid (not provided) to the cavity, simulating the experience of breaking into the pleural cavity with a gush of fluid released. (We recommend using water to avoid staining RespiPatient with blood-like substances). The chest drain insert is designed so that the tube can be sutured in place. Each intercostal landmark can be used once or twice depending on the size of the incision performed.

To replace the chest drain inserts:

- Tuck the chest skin out from the insert and remove from the ribs. If liquid has been introduced, please take extra care during removal.
- Dispose of the tissue insert safely
- If liquid has been used to illustrate hemothorax, dry the internal structure to ensure there have been no leakages.
- Chest drain inserts are labeled L for left and R for right for easy identification.
- Align the set with the slotted rib compartments.
- If using liquid, remove the red sealing cap and insert the desired fluid (we recommend water to avoid staining).
- Fill the cavity to the desired level and tighten the cap.
- A small amount of lubrication can be added to reduce the friction upon entry. The insert should fit into position with little force.
- Ensure again that the insert is parallel and aligned with the outer skin. Run your finger around the edge of the insert for correct alignment.

### 5.3.3. Replacing Neck Skin and Larynx Membrane Inserts

A new larynx membrane insert can be used for each trainee to provide a unique experience. The piece can be easily removed and replaced.

- Ensure that the larynx is pushed down as far as it will go against the sternum wall, so it will be in the right position.
- When practicing airway management procedures, cut a piece of sealing tape approximately 2 – 2.5 inches (5 - 6 cm) and attach it over the Crico and Trach hole in the airway. For proper adhesion, make sure the airway is clean and dry before attaching the tape for proper adhesion.
- Lubricate the internal airway and the nasal passage with the silicone lubricant provided.
- Ensure all airway devices are prepared to the manufacturer's recommendations and instructions.

- Before insertion of the airway device, generous amounts of lubricant should be used to cover the surfaces in contact with the airway, the cricothyroid membrane, and the tracheal rings.
- To ensure full functionality, securely attach pieces using the hook-and-loop type fasteners.

## 6 Specifications

### 6.1 Electrical Specifications

#### 6.1.1. Supply Voltage

Input/Output: 100 to 240 V AC

### 6.2 Physical Specifications

#### 6.2.1. RespiPatient

Dimensions (lying on tabletop):  
27.5" X 18.25" X 9.5"  
(69.85 cm X 46.36 cm X 24 cm)  
Weight:  
Approx. 23 lbs (10.4 kg)

#### 6.2.2. RespiPatient Interface Box

Dimensions:  
17.25" X 8.625" X 5.125"  
(43.815 cm X 21.9 cm X 13 cm)  
Weight:  
Approx. 24 lbs (10.9 kg)

#### 6.2.3. Hard-Sided Transport Case

External Dimensions:  
37" X 27.2" X 14.4"  
(94 cm X 69 cm X 36.6 cm)  
  
Weight:  
Approx. 110 lbs (49.9 kg)  
(Complete system in transport case)

### 6.3 Ancillary Materials Specifications

Obtain the ancillary materials listed below using the stated parameters for selecting the correct sizes:

Nasal Intubation: 6.0 mm ID  
Oral Intubation: 8.0 mm ID  
LMA laryngeal masks: Size 3-5  
Similar respective sizes for other supraglottic devices

### 6.4 Environmental Specifications

#### 6.4.1. Storage

Temperature: -10 °C to 50 °C (allow device to reach approximate room temperature before use)  
Humidity: 10 to 95%, noncondensing

#### 6.4.2. Operation

Temperature: +10 °C to 40 °C  
Humidity: 10 to 95%, noncondensing

**NOTE:** Specifications are subject to change without notice.

## 7 Support Resources

IngMar Medical is dedicated to customer support. We encourage you to visit our website at [www.ingmarmed.com](http://www.ingmarmed.com) for support options. While the primary source of user information is this User's Manual, there are a number of other ways to receive support.

- Updated editions of this User's Manual can be downloaded from the IngMar Medical website.
- Answers to Frequently Asked Questions (FAQs) are accessible via our website.
- We provide in-depth, hands-on small group customer-site training.

Please contact Customer Care at 1-800-583-9910, ext. 107, about purchasing additional support plans or training. Email us at [info@ingmarmed.com](mailto:info@ingmarmed.com). Or contact us from the [Contact Us](#) page of our website, [www.ingmarmed.com](http://www.ingmarmed.com).

## 8 Consumables Replacement

Consumable items are available for RespiPatient including:

- Lubrication – Part # 15 30 744
- Airway Sealing Tape – Part # 31 10 780
- Overlay Neck Skin Cover (pack of 5) – Part # 31 10 781
- Replaceable Combo Larynx – Part # 31 10 782
- Subcutaneous Fat Tissue (pack of 5) – Part # 31 10 783
- Chest Drain Inserts Three Layer (set) – Part # 31 10 784
- Chest Drain Inserts One Layer (set) – Part # 31 10 785
- Larynx Membrane Inserts (pack of 50) – Part # 31 10 786

Please contact Customer Care at 1-800-583-9910, ext. 107 if you are interested in purchasing consumable items. Email us at [info@ingarmed.com](mailto:info@ingarmed.com). Or contact us from the [Contact Us](#) page of our website, [www.ingarmed.com](http://www.ingarmed.com).

Alternatively, contact TruCorp for consumable items by visiting <http://www.trucorp.com/consumables/>.

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