Instruction Manual

Nasco Healthcare Auscultation Trainer 2.0

LF01290 & LF01290EX

Revision B

Nasco HEALTHCARE

About The Simulator

The Nasco Healthcare Auscultation Trainer 2.0 features 33 Heart, Lung, and Bowel sites for Auscultation. The Simulator duplicates human conditions as closely as modern plastics, electronics, and programming will allow. This updated version also includes a collection of preset scenarios with LED-Assist. Each group of sites (Heart, Lung, and Bowel) is color-coded and can be customized. Both the Auscultation Trainer Torso 2.0 and the Smart Scope 2.0 devices are newly configured with USB-C charging capability.

List of Components:

1. Auscultation Trainer Torso 2.0
2. Smart Scope 2.0
3. iPad (LFO1290 Only)
4. Soft Carry Case
5. Quick Start Guide
6. Dual-Head Stethoscope
7. USB-C Charging Cable

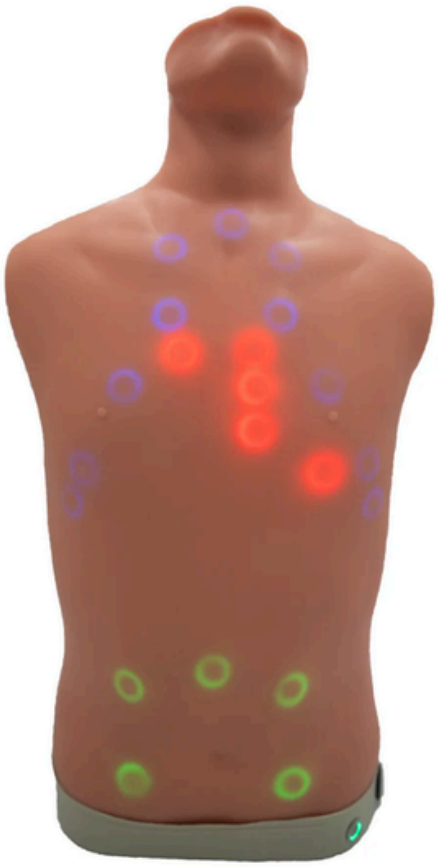
Download the **Be READY™ App**

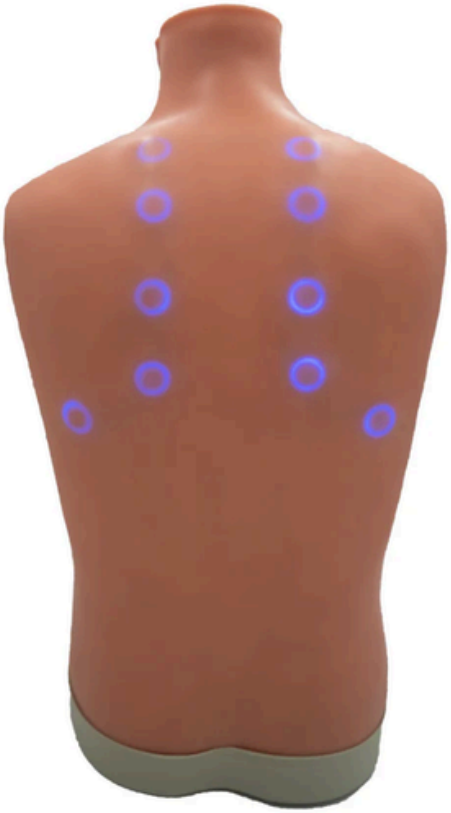
Product Setup & Use:

- Remove Torso, Scope, and iPad (LF01290 only) from Carry Case
- Ensure the Torso Trainer and Scope are completely charged before use.
- Download the Be READY Auscultation App onto the iPad.
- Press the power button on the base of the torso trainer to power on. The power button should illuminate green when ready. Likewise, press and hold the black power button on the Smart Scope to power on. A green LED indicator light will illuminate when the device is ready.
- Open the Be READY Auscultation App on the iPad.
- When both devices are powered on, they will appear on the Dashboard of the app under "Devices". If they do not, refresh the device list by pressing the blue “Refresh” icon.
- To connect each device in the app, press the Bluetooth icon to the far right of each device on the Dashboard's device menu. The Bluetooth icon should change to blue upon successful connection.
- To begin a simulation, select "Launch" under Simulations → Auscultation.
- After launching the simulation, select a scenario from the list of provided scenarios in the app. If you wish to create your own scenario, see page 3 for separate instructions on how to do so.

Product Setup & Use (Cont'd):

- Adjust desired sound volume, toggle LED-Assist on/off, and toggle tablet audio on/off under Scenario Settings. *Note: Regardless of tablet audio selection, auscultated sounds will play through the Smart Scope.*
- Select "Start Scenario" to begin a simulation and begin auscultation. Volume, Tablet Audio & LED-Assist can be toggled on/off as needed.
- Place the Stethoscope heads in the ears gently and use the Scope to find the required sites.
- During Auscultation, sites will illuminate yellow on the manikin and in the app as they are auscultated successfully.
- See "Log", located below Site Manager, to view live site and sound history.
- Press "Save Session" underneath the Log to save session. Results will appear on the Dashboard under "Sessions". Sessions can also be exported.





Self-Authored Scenarios

1. To create your own scenario: On the Auscultation page, select "Add Scenario". On the ensuing page, add sites and assign sounds/colors as needed. Save the new scenario by scrolling to the bottom of the page and selecting "Save".
2. To avoid having to create a scenario from scratch, utilize the "Copy Scenario" feature on the Auscultation page. Press the blue "Copy" icon to the right of any preset or custom scenario. On the ensuing page, add or delete sites & modify sounds/colors as needed. Make sure to name and save the new scenario at the bottom of the screen.

Care and Maintenance

1. Ensure Trainer is kept upright.
2. Avoid pulling or grasping on the skin material.
3. Avoid Ink. All ink will leave indelible marks.
4. Ensure units are fully charged before use.

Troubleshooting

1. Trouble downloading the App:
   - Re-download from App store if necessary.
   - Please note at the present time the app is only downloadable via the Apple App Store and is not compatible with Android Devices.
2. Connecting to the App
   - Ensure both devices are charged and turned on
   - If no connection is established or the device does not appear, restart the app.
3. Training Mode
   - In this mode , the trainer will illuminate a single site in order. After the site is located by the Smart Scope, the trainer will proceed to the next site.

Replacement Parts & Supplies

LF0729I: Auscultation LED Controller Replacement
LF07292: Smart Scope 2.0
LF07293: Auscultation Teaching Scope Splitter Replacement
LF09979: Nasco Cleaner

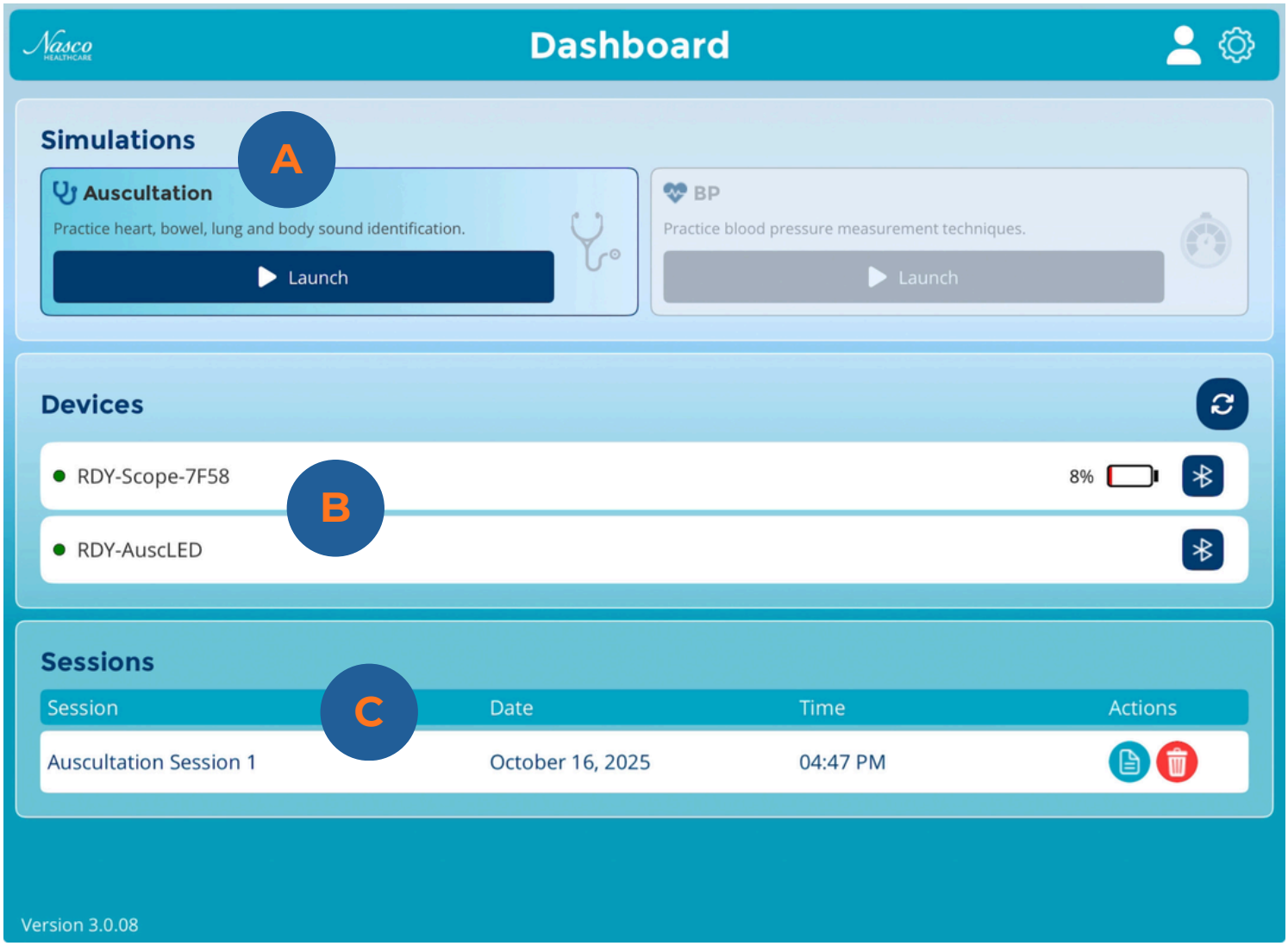
Warranty

This manikin is covered under a 5-year warranty; all included electronic components are covered by a separate 2-year warranty. All 3rd party products, including iPad, are covered by the manufacturer's warranty. Full warranty details can be found on the Nasco Healthcare website.

Nasco HEALTHCARE
Nasco Healthcare
16 Simulaids Drive
Saugerties, NY 12477
1-833-NASCOHC (627-2642)
info@nascohealthcare.com
www.nascohealthcare.com

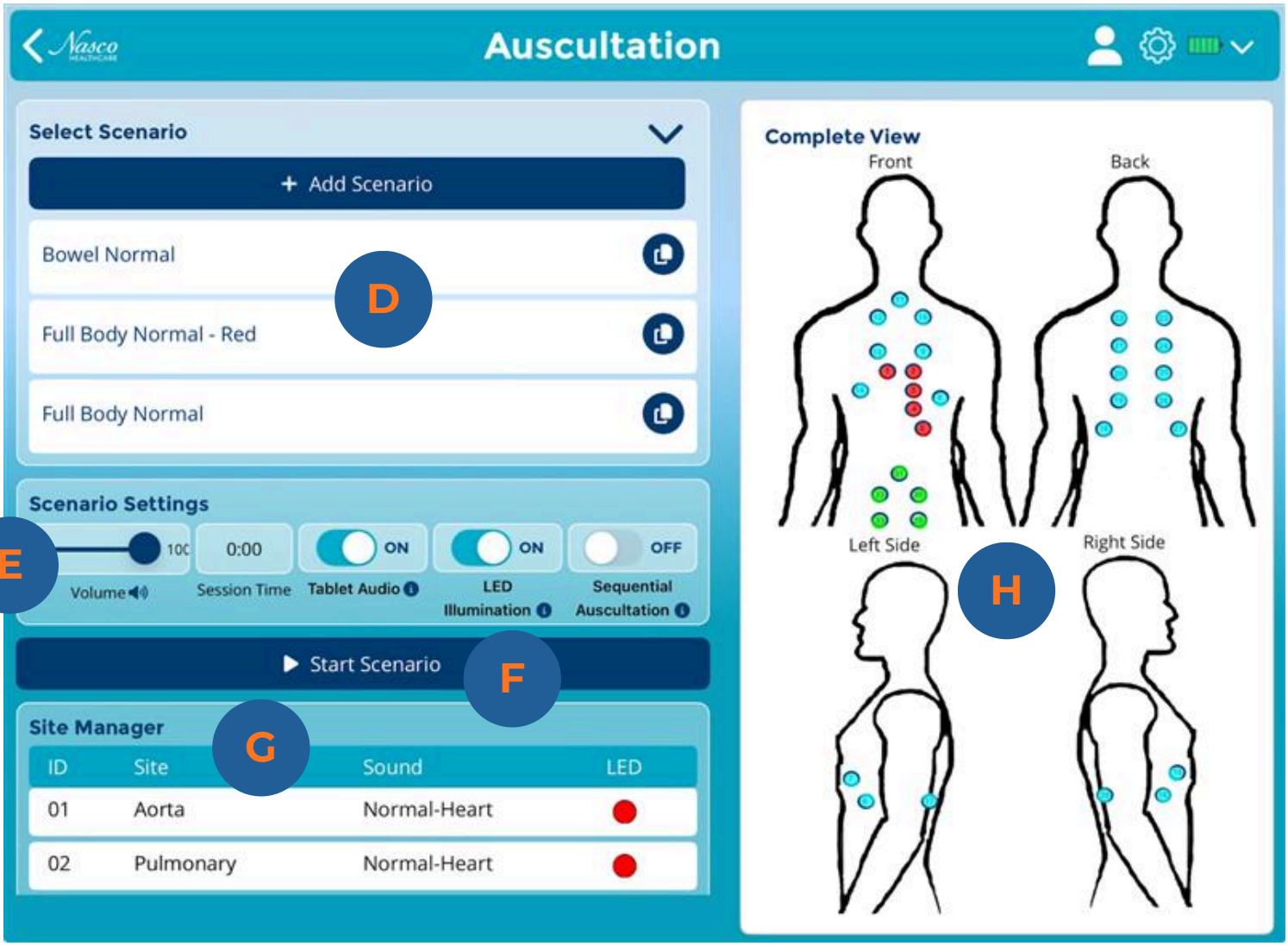
Be READY™ App

App Updates: As our team releases regular updates to enhance performance and usability, the appearance of some screens in your version of the app may differ slightly from the images in this guide. Please ensure that you are using the latest version of the app.



A. Simulation Selection: Click “Launch” to start the Auscultation simulation.
B. Devices: Check device battery and Bluetooth connection.
C. Sessions: Review session data.

Be READY™ App

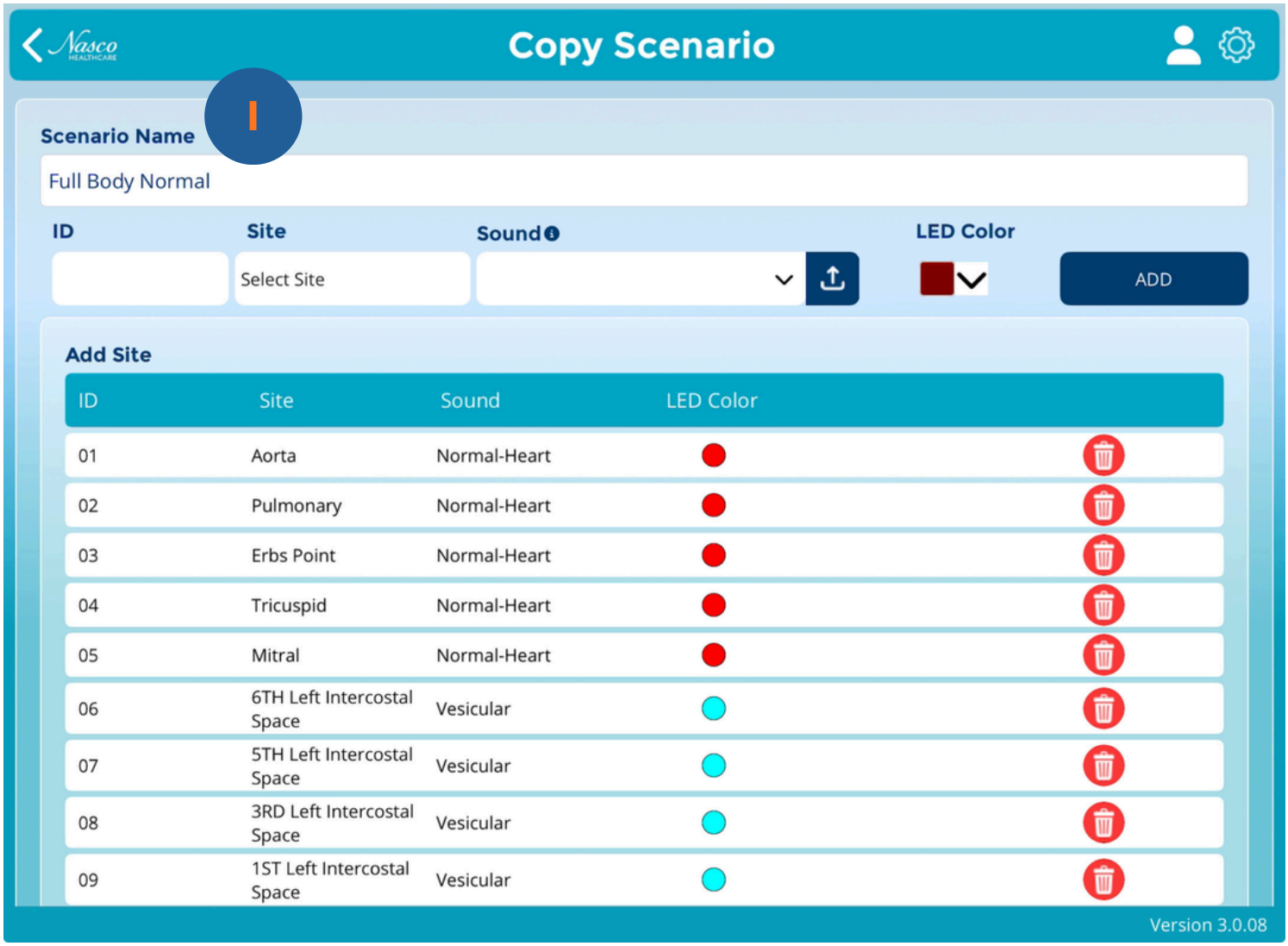


D. Scenario Selection: Select from a list of preset scenarios, or create your own.
E. Scenario Settings: Customize audio-visual output for the selected scenario.
F. Start/Stop Scenario
G. Site Manager: Shows the specific sites and the sounds associated with the selected scenario. Scroll through to see all.
H. Complete View: Displays all available sites for the given scenario and their status, utilizing the following color-coded site defaults:

- Blue = Lung
- Green = Bowel
- Red = Heart
- Yellow = Active Site

Not Pictured: Log (located below Site Manager): Shows site and sound history.

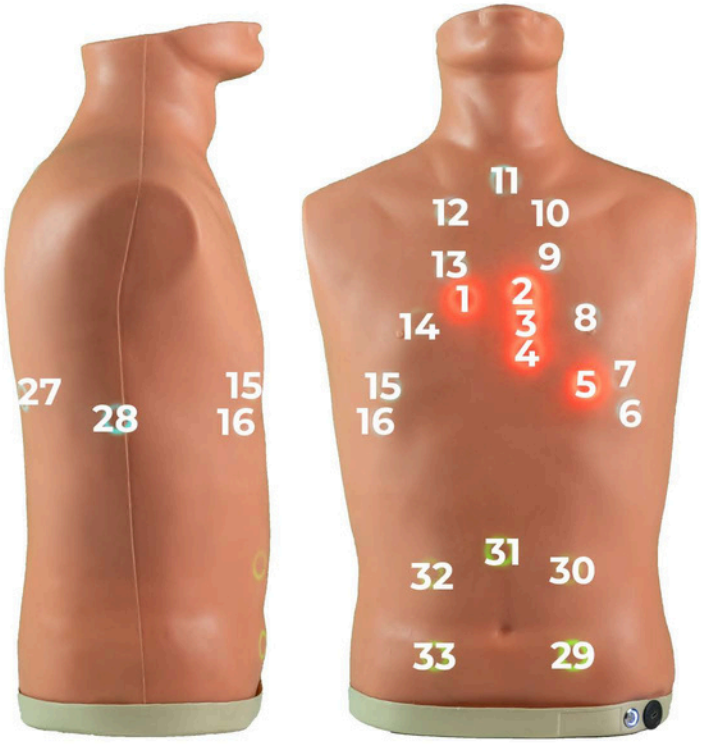
Be READY™ App



I. Edit/Create/Copy Scenario Page: Here the instructor can specify Scenario Name, ID, Site(s), Sound(s), and change the LED color from their defaults.

Site Names and Locations

Number	Site Name
1	Aorta
2	Pulmonic
3	Erb's Point
4	Tricuspid
5	Mitral Valve
6	Sixth Left Intercostal Space
7	Fifth Left Intercostal Space
8	Third Left Intercostal Space
9	First Left Intercostal Space
10	Anterior Left Apical
11	Anterior Trachea
12	Anterior Right Apical
13	First Right Intercostal Space
14	Third Right Intercostal Space
15	Fifth Right Intercostal Space
16	Sixth Right Intercostal Space
17	Mid Axillary Left
18	Lateral Basal Left
19	Posterior Basal Left
20	Superior Left Lower Lung
21	Posterior Left Upper Lung
22	Posterior Left Apical
23	Posterior Right Apical
24	Posterior Right Upper Lung
25	Superior Right Lower Lung
26	Posterior Basal Right
27	Lateral Basal Right
28	Mid Axillary Right
29	Left Lower Quadrant
30	Left Upper Quadrant
31	Aortic Bowel
32	Right Upper Quadrant
33	Right Lower Quadrant



Anatomical Right

Anterior

Posterior

Anatomical Left

Heart Sounds

Sound	Description
Normal	Includes a first and second sound both sounding normal
Aortic Regurgitation	Has a decrescendo murmur starting early in diastole. S1 and S2 are normal, and the murmur is high pitched
ASD - Atrial Septal Defect	S2 is Split with a brief diamond-shaped murmur in early systolic period
Holosystolic Murmur	A murmur that begins immediately after the first heart sound(S1) and goes to the second. This is done with a high-pitched murmur.
Mid-Systolic Click	Both S1 and S2 are normal however there is a small click beat between the two that is very audible.
Mid-systolic Murmur	Murmur sound occurring between the first and second beat during the systolic period. The murmur is diamond shaped.
Mitral Stenosis	The S1 is increased in intensity while S2 is normal and unsplit. A diamond shaped murmur at low frequency follows the S2 during the diastolic period.
Pulmonary Valve Stenosis	S1 is normal and the normal splitting of S2 is widened. Harsh diamond-shaped ejection murmur right before S2
S3 Gallop	The S3 (Third Heart sound) is low pitched beat that comes directly after the second beat but right before the next S1
S4 Gallop	The S4 (Fourth Heart sound) is a low-pitched beat that comes shortly before the S1 (late diastolic period)
PDA - Patent Ductus Arteriosus	The S1 and S2 are normal with a continuous diamond-shaped murmur which runs from the beginning of the systolic period to the end of the diastolic period peaking at S2
VSD - Ventricular Septal Defect	The S1 is normal and S2 is unsplit (skips a beat) with S3. A medium-pitched murmur is heard throughout all the systolic period

Bowel Sounds

Sound	Description
Normal	Consists of moderate clicks and gurgles
Hyperactive	Similar to normal bowel sounds but with more activety and loudness in clicks and gurgles
Hypoactive	Similar to normal bowel sounds but with less activety and quietness in clicks and gurgles

Lung Sounds

Sound	Description
Vesicular Normal Breathing	Soft and low-pitched with a rustling quality during inspiration (Inhaling) and are even softer during expiration (Exhaling).
Egophony	A voiced sound (often heard while saying "A" or "E") with a nasal quality. Described as a goat bleating.
Pulmonary Edema	A fine crackle sound due to an excess of liquid in lungs
Bronchovesicular	Normal breathing heard in the mid-chest. The amount of inhaling and exhaling is the same. The pitch is a combination of Bronchial and Vesicular.
Bronchial	Hollow sound with a tubular quality and higher pitch compared to vesicular. Exhaling is slower than inhaling.
Crackles - Fine	Described as popping of wood fire or Velcro being pulled apart. Higher pitch than coarse crackles.
Crackles - Coarse	Described as bubbling, this sound has a lower pitch then fine crackles and tend to linger longer.
Rhonchi	Has a low-pitched wheeze that is continuous for both inhaling and exhaling and low pitched. Often having a snoring, gurgling, or rattle-like quality
Wheeze	Described as adventitious and continuously changing sound.
Wheeze Monophonic	Loud, continuous sounds occurring throughout the respiratory cycle. Constant pitch which creates a musical tone. Tone is lower pitched compared to adventitious breathing sounds.
Stridor	Loud, High-pitched crowing breath sounds heard during inhaling but as the patient gets worse the sound can be heard throughout the respiration period.
Pleural Rubs	Described as creating or grating sounds similar to walking on fresh snow or leather on leather
Pectoriloquy	Having the patient say "1-2-3" a few times and if the voice's high frequency seems dampened it suggest an abnormal lung area
Cavernous	A form of bronchial which is lower in pitch