About the Auscultation Simulator

The Life/form® Auscultation Trainer Simulator duplicates heart and lung conditions selected by the instructor by wireless remote control. The student must palpate to identify the correct auscultation sites. They will hear different heart and lung sounds as the SmartScope™ is moved from site to site. The simulator duplicates human conditions as closely as modern plastics and electronic technology allows — it’s almost the real thing. Care and treatment should be the same as with a patient.

The simulator has six heart sites and five lung sound sites on the anterior surface, and two midaxillary sites. The remote control can select from 12 different heart conditions, as well as 16 lung conditions. The instructor can select any condition, then switch to another condition easily so the student can compare sounds and make a diagnosis.

The remote control does not have to be pointed directly at the manikin or stethoscope to operate. One remote control will operate multiple sets of SmartScopes™ and manikins simultaneously. Great for group instruction. The range of the remote control is up to 100 feet.

General Instructions for Use

To begin using the Auscultation Trainer, press the red power button. This turns on the remote control and sends a signal to activate the stethoscope as well. After the unit is activated, the display will be in the "status" mode, displaying the current menu settings for the heart and lung conditions.

To select a new condition, press either the heart or lung button. This will put the display into the menu mode. The user can select a condition by either using the number buttons, or by viewing the conditions in sequence using the scroll button. After the condition is selected, press the enter button to activate.

The remote control can be programmed to these heart conditions:
01 Normal
02 Aortic regurgitation
03 Pulmonary stenosis
04 Mitral stenosis
05 Holosystolic
06 Mid-systolic
07 S3 Gallop
08 S4 Gallop
09 Systolic click
10 Atrial septal defect
11 PDA
12 VSD

The remote control can be programmed to these lung conditions:
01 Normal Lung
02 Normal Vesicular
03 Wheezes
04 Mono wheeze
05 Fine crackle
06 Coarse crackle
07 Ronchi crackle
08 Stridor
09 Cavernous
10 Bronchovesicular
11 Bronchial
12 Pulmonary edema
13 Infant
14 Friction rub
15 Egophony
16 Pectoriloquy

Consult the enclosed laminated card for lung and heart sound site locations.

To listen to the selected sounds, place the earpieces in ears angled in a forward position. Place the diaphragm of the SmartScope™ over one of the appropriate sites on the manikin (see diagram on back).

As an alternative, the Amplifier/Speaker System (LF01189U) can be used, allowing an entire classroom to hear at the same time. To connect the speaker, plug the speaker cord into the speaker jack on the top of the SmartScope™ box. When a speaker is connected to the SmartScope™, the earpieces will not work. Place the diaphragm of the SmartScope™ over the appropriate sites on the manikin.

Note: The remote has a battery saver that shuts the unit down after eight minutes if the remote is left on the same setting. To prevent it from shutting down, select a different heart or lung sound within the eight-minute period of time.

Troubleshooting

• Make sure batteries in both the remote and the SmartScope™ are fully charged and properly installed
• The remote has a battery saver that shuts the unit down after eight minutes if the remote is left on the same setting. To prevent it from shutting down, select a different heart or lung sound within the eight-minute period of time.
• Correct placement of the SmartScope™ is required to hear the sounds. Moving the SmartScope™ slowly across the area will help locate the sensor in the torso so that the sounds can be heard.
• If you are sure you have the SmartScope™ in proper position and you still cannot hear any sounds, restart the unit by turning the power off and on, and selecting a different heart or lung sound.

Available Supplies
LF01144U Additional SmartScope™
LF01148U Replacement Remote Control
LF01189U Amplifier/Speaker System
First right intercostal space
Second right intercostal space (aortic)
(lower left sternum)
First left intercostal space
Second left intercostal space (pulmonic)
Third left intercostal space (Erb’s point)
Fourth left intercostal space
Apex
Midaxillary
Tracheal Site

Heart and Lung Sites

Lung Sites
Heart Sites