

**Product Supervision**

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\* A stethoscope is not included.

**Used by "96%" of medical faculties in Japan and OSCE in South Korea, the new and improved "LSAT"!**

Kyoto Kagaku's LSAT has upgraded to offer an efficient and effective training for respiratory sound auscultation. This unique and exclusive simulator is best suited for training in sound classification and is controlled by a touch-screen tablet.

36 lung sound cases can be played with or without the heart sound. Each case is accompanied by descriptions and clinical data of the patient including patient history, illustrations, radiograph and CT images.

**Cases** Background heart sounds are now available in 5 volume levels.

<p><b>Normal</b></p> <p>A01 standard A03 mildly strong sounds A05 mildly rapid A07 loud heart sounds</p>	<p><b>Abnormal</b></p> <p>B01 weak: left lower area B02 weak: left whole area (adhesion) B05 weak: left whole area (pneumothorax) B07 absent: right middle and lower areas B09 weak: right whole area B11 absent: right whole area B13 weak: whole area B15 bronchial breathing</p>
<p><b>Coarse Crackles</b></p> <p>C01 right lower area C03 both lower area C05 right upper and middle area C07 left lower area C09 both upper area C11 whole area</p>	<p><b>Fine Crackles</b></p> <p>D01 both lower area D03 both middle lower area D05 whole area (IPF) D07 whole area (NSIP)</p>
<p><b>Wheezes</b></p> <p>E01 upper area 600-700Hz E03 upper area 350-450Hz E05 upper area 200-1000Hz</p>	<p><b>Rhonchi</b></p> <p>F01 trachea and upper area 150-250Hz F03 trachea and upper area 150-450Hz (polyphonic) F05 trachea and upper area 80-120Hz F07 whole area 80-200Hz</p>
<p><b>Miscellaneous continuous sounds</b></p> <p>G01 stridor G03 squawks</p>	<p><b>Miscellaneous</b></p> <p>H01 pleural friction rubs: right lower and middle area H03 pleural friction rubs: left lower area H07 Hamman's sign H09 Vocal fremitus</p>

**Specifications :**

<b>Set Includes:</b>		<b>Manikin Size:</b>
1 torso manikin	1 LAN cable	W39 x D45 x H 130 cm
1 control PC	1 LAN adapter	
1 PC (built-in the unit)	1 external speaker (built-in)	
1 AC adapter	1 lung T-shirt	
1 power cord	2 instruction manual	

## Features

### Basic Features

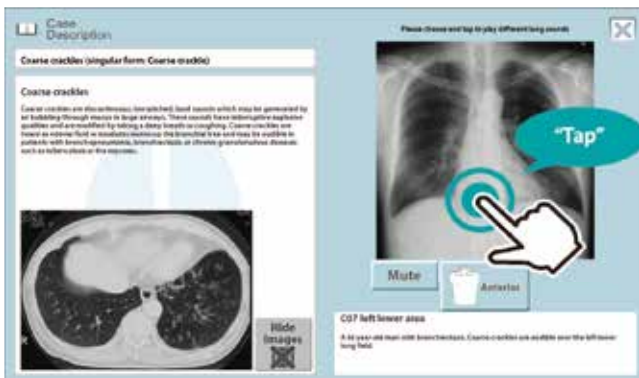
#### Auscultation sites




- **Anterior**
  1. trachea
  2. upper right lung field
  3. upper left lung field
  4. middle left lung field
  5. middle right lung field
  6. lower right lung field
  7. lower left lung field
- **Posterior**
  0. upper left lung field
  1. upper right lung field
  2. middle right lung field
  3. middle left lung field
  4. lower left lung field
  5. lower right lung field
  6. right costophrenic angle
  7. left costophrenic angle

#### Case Information

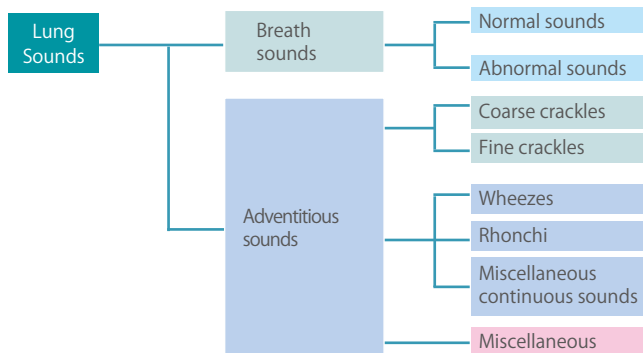
Images of plain X-ray, CT and bronchoscopy are included.



 Lung sound of each area can be played by tapping the plain X-ray image

#### Classification of Lung Sounds

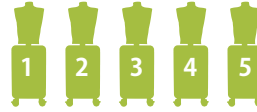
LSAT features lung sounds classification of the American Thoracic Society based on acoustic analysis of recorded clinical sounds. With this approach, lung sounds are categorized as continuous (wheezes, rhonchi, or stridor) or discontinuous (crackles). Crackles are further identified as fine or coarse.



### NEW Features

#### Wireless multi-unit operation

Up to five "LSAT" can be controlled by one wireless control PC.



- Each simulator can be individually set with a respective case.
- Cases can be switched promptly by clicking at any time during session.

#### Anterior and posterior auscultation at the same time

Two or more trainees can work simultaneously.



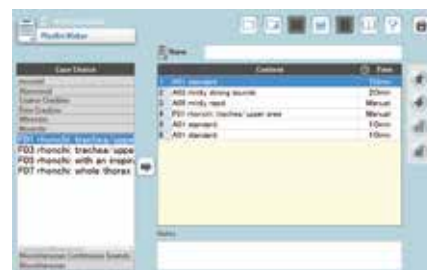
#### Indication of inspiration and expiration with the LED light panel

Note the rhythm of breathing while listening to the sound during examination.



#### Create a custom playlist

Choose from 36 sound cases. Create a custom playlist to optimize training sessions.



#### Error Indication System

The simulator automatically scans for errors during start-up.

