

M164

Sakamoto Auscultation Simulator

- Weight/About 14kg ● Case size/W65×D58×H28cm
- Accessories/USB cable, CD-ROM soft (Japanese, English), Stethoscope, Chest cover, Storage case

By reproducing various symptoms, supports practice of auscultation with a feeling of being in a clinical situation.



Chest cover (Indicate auscultatory site)



Feature

1. Learning through practice with a sense of reality

- Sternum and soft touch of the skin
- Seven built-in speakers (volume adjustable) provide true-to-life experience of hearing cardiac and breath sounds of actual patients by applying a stethoscope.

2. Realistic auscultatory sounds

- Reproduction of complicated cases is possible by combinations of 20 cases of cardiac sounds and 12 cases of breath sounds.
- Differences in auscultatory sounds can be confirmed realistically by the use of a personal computer (Windows).

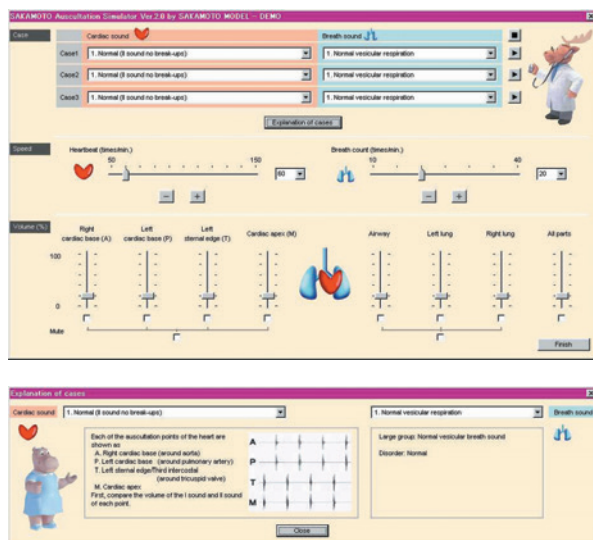
3. Adjustable to details

- The heart rate and respiratory rate are adjustable.
- The volume of cardiac and breath sounds is adjustable in each region (cardiac and pulmonary regions) or all regions.

4. Presentation of case profiles

- Presentation of case profiles and points of attention with graphs facilitates understanding of characteristics of each disease.

Practice



Cardiac sounds

- | | |
|---|-------------------------------|
| 1 Normal (no splitting of the second sound) | 11 Mitral stenosis |
| 2 Normal (split second sound) | 12 Mitral insufficiency |
| 3 Abnormal split second sound | 13 Aortic stenosis |
| 4 Increased apical second sound in hypertension | 14 Aortic insufficiency |
| 5 Apical fourth sound | 15 Subaortic stenosis |
| 6 Innocent murmur | 16 Atrial septal defect |
| 7 Aortic ejection sound | 17 Ventricular septal defect |
| 8 Mid-systolic clicks | 18 Pulmonary stenosis |
| 9 Mitral escape clicks /murmur | 19 Acute mitral insufficiency |
| 10 Tricuspid insufficiency | 20 Pulmonary insufficiency |

Breath sound

	Major Category	Minor Category	Disease
1	Normal alveolar breath sound		Normal
2	Intermittent rales (moist rales)	Fine crackles	Interstitial pneumonia, pulmonary fibrosis / pulmonary edema
3	Intermittent rales (moist rales)	Coarse crackles	Pulmonary edema, pneumonia, alveolar effusion
4	Continuous rales (dry rales)	Low pitched rhonchi (sonorous rhonchi)	Stenosis of middle-large bronchi, bronchial secretion
5	Continuous rales (dry rales)	High pitch rhonchi, wheeze 1	Bronchiolar stenosis, bronchial asthma
6	Continuous rales (dry rales)	High pitch rhonchi, wheeze 2	Bronchiolar stenosis, bronchial asthma
7	Tachypnea	Consonating rales	Nervous dyspnea
8	Intensified bronchovesicular sounds		Resting dyspnea
9	Continuous rales (dry rales)+ intermittent rales (moist rales)	High pitch rhonchi, wheeze+fine crackles	Cardiac asthma
10	Continuous rales (dry rales)	High pitch rhonchi, wheeze+prolonged exhalation	Bronchial asthma
11	Abnormal respiratory pattern	Tachypnea (shallow respiration) 	Central hyperpnea (midbrain disorder) hyperventilation syndrome
12	Abnormal respiratory pattern	Kussmaul respiration 	Diabetic ketoacidosis, uremia

Specifications

Size	Main unit W55×D23×H50cm Box W16×D23×H 9cm
Heart sounds	20 cases×4 sites
Heart rate	adjustable
Respiratory sounds	12 cases×3 sites
Respiratory rate	adjustable

Volume	adjustable
Power source	AC100V 50/60Hz
Consumption of electricity	100W
Operating temperature range	5~40°C