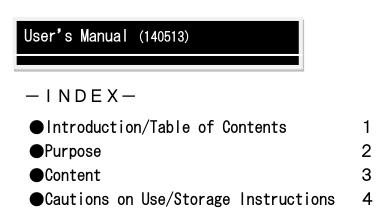
# M164 Sakamoto Auscultation Simulator





| !<br>Note | Confirm the main unit and accessories directly after the product arrives. If there is any defect |
|-----------|--|
|           | or breakage, inform the dealer or Sakamoto Model.  |



Thank you for purchasing our product, "Sakamoto Auscultation Simulator."

Read this user's manual carefully in order to use the product for a long time appropriately.

This product is closely checked before factory shipment. However, when this product arrives, open it soon, and check if anything on the main unit and accessories are missing or broken.

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### Purpose

This product is used to perform training for the following items:

 Auscultation for 20 cases of cardiac sounds (Right and left base of heart, left sternal border and cardiac apex) Heart rate: 50 – 150 bpm

### 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 seco                     | nd sound in hypertension | 14 | Aortic insufficiency       |
| 5 Apical fourth soun                        | nd                       | 15 | Subaortic stenosis         |
| 6 Innocent murmur                           |                          | 16 | Atrial septal defect       |
| 7 Aortic ejection sou                       | und                      | 17 | Ventricular septal defect  |
| 8 Mid-systolic clicks                       |                          | 18 | Pulmonary stenosis         |
| 9 Mitral escape click                       | s /murmur                | 19 | Acute mitral insufficiency |
| 10 Tricuspid insufficie                     | ency                     | 20 | Pulmonary insufficiency    |

• Auscultation for 12 cases of breathing sounds (Respiratory tract region, left and right lung regions)

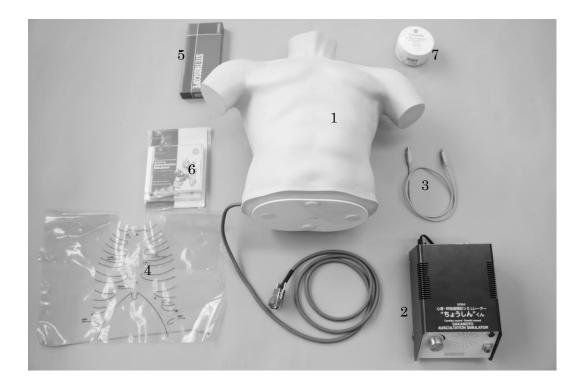
Respiratory rate: 10 - 40 breaths per minute

#### Breath sound

| Breath sound   |  |  |  |  |
|--|--|--|--|--|
| Major Category   | Minor Category   | Disease  |  |  |
| Normal alveolar<br>breath sound                                      |  | Normal   |  |  |
| Intermittent rales<br>(moist rales)                                  | Fine crackles  | Interstitial pneumonia,<br>pulmonary fibrosis /<br>pulmonary edema   |  |  |
| Intermittent rales<br>(moist rales)                                  | Coarse crackles  | Pulmonary edema,<br>pneumonia,<br>alveolar effusion  |  |  |
| Continuous rales<br>(dry rales)                                      | Low pitched rhonchi<br>(sonorous rhonchi)  | Stenosis of middle-large<br>bronchi, bronchial<br>secretion  |  |  |
| Continuous rales<br>(dry rales)                                      | High pitch rhonchi,<br>wheeze  | Bronchiolar stenosis,<br>brochial asthma   |  |  |
| Continuous rales<br>(dry rales)                                      | High pitch rhonchi,<br>wheeze  | Bronchiolar stenosis,<br>brochial asthma   |  |  |
| Tachypnea  | Consonating rales  | Nervous dyspnea  |  |  |
| Intensified<br>bronchovesicular<br>sounds                            |  | Resting dyspnea  |  |  |
| Continuous rales<br>(dry rales)+ intermittent<br>rales (moist rales) | High pitch rhonchi,<br>wheeze+fine crackles  | Cardiac asthma   |  |  |
| Continuous rales<br>(dry rales)                                      | High pitch rhonchi,<br>wheeze+prolonged exhalation   | Bronchial asthma   |  |  |
| Abnormal<br>respiratory<br>pattern                                   | Tachypnea<br>(shallow 60times/min  | Central hyperpnea<br>(midbrain disorder)<br>hyperventilation syndrome  |  |  |
| Abnormal<br>respiratory<br>pattern                                   | Kussmaul /////<br>respiration 36times/min  | Diabetic ketoacidosis,<br>uremia   |  |  |
|  | Major Category<br>Normal alveolar<br>breath sound<br>Intermittent rales<br>(moist rales)<br>Continuous rales<br>(dry rales)<br>Continuous rales<br>(dry rales)<br>Continuous rales<br>(dry rales)<br>Tachypnea<br>Intensified<br>bronchovesicular<br>sounds<br>Continuous rales<br>(dry rales)+intermittent<br>rales (moist rales)<br>Continuous rales<br>(dry rales)+intermittent<br>rales (moist rales)<br>Continuous rales<br>(dry rales)+intermittent<br>rales (moist rales)<br>Continuous rales<br>(dry rales)+intermittent<br>rales (moist rales)<br>Continuous rales<br>(dry rales)<br>Abnormal<br>respiratory<br>pattern | Major Category Minor Category   Normal alveolar<br>breath sound Minor Category   Intermittent rales<br>(moist rales) Fine crackles   Intermittent rales<br>(moist rales) Coarse crackles   Continuous rales<br>(dry rales) Low pitched rhonchi<br>(sonorous rhonchi)   Continuous rales<br>(dry rales) High pitch rhonchi,<br>wheeze   Continuous rales<br>(dry rales) High pitch rhonchi,<br>wheeze   Continuous rales<br>(dry rales) High pitch rhonchi,<br>wheeze   Tachypnea Consonating rales   Intensified<br>bronchovesicular<br>sounds High pitch rhonchi,<br>wheeze+fine crackles   Continuous rales<br>(dry rales)+ intermittent<br>rales (moist rales) High pitch rhonchi,<br>wheeze+fine crackles   Continuous rales<br>(dry rales) High pitch rhonchi,<br>wheeze+prolonged exhalation   Abnormal<br>respiratory<br>pattern Tachypnea<br>(shallow<br>respiration) MMMMM<br>actions/min |  |  |

# Content

- 1) Model Qty.1
- 2) Mechanical device Qty.1
- 3) USB cord Qty.1
- 4) Transparent chest cover Qty.1
- 5) Stethoscope Qty.1
- 6) Software installation CD (Japanes
- 7) Baby powder 1 can
- (Japanese/English) Qty.1



# **Cautions on Use**

- 1) Do not place the model onto a newspaper or a printout, because it is made of silicone and can get dirty or develop wrinkles easily. If the skin on the model becomes dirty, clean by wiping it down gently using a neutral detergent or alcohol based agent.
- 2) Do not use an oil-based magic marker or ink because it will stain the skin on the model and it cannot be removed.
- 3) If any excessive loads are hung from the model or if dropped, it will damage the model.
- 4) If anything sticks to the model, apply some powder provided in the accessories. If the model is used without applying the powder, it may damage the model.
- 5) Refer to the "User manual" and the "Installation procedure" included with the software installation CD for further details on the connection and re-installation methods.
- 6) If a defect or problem with the product is discovered during use, stop using the product immediately and contact Sakamoto Model or an authorized dealer.
- 7) This product is a simulator capable of supporting advanced medical training. However, Sakamoto Model does not guarantee the same results during actual treatment.
- 8) Please note that the specifications of this product may be changed without prior notice in order to make improvements to the product.

## Storage Instructions

- 1) When the product gets dirty, soak a soft cloth with a neutral detergent to remove the dirt or stain. Then, wipe it down with water. Thereafter, use a dry cloth to remove any remaining moisture and then apply the baby powder.
- 2) Avoid storing the product in direct sunlight or in locations with high temperature and humidity.

### SAKAMOTO MODEL C O R P O R A T I O N

Head office 34,Higashitakagicho,Shimogamo Sakyo-ku, KYOTO 606-0865, JAPAN Phone: +81-75-701-1135 Fax: +81-75-722-5638 E-mail:info@sakamoto-model.com URL:http://sakamoto-model.co.jp

Overseas Sales Department 1-9-29,Senbahigashi,Minoh City,Osaka 562-0035,JAPAN Phone: +81-72-729-8350 Fax: +81-72-729-8385 E-mail:trade@sakamoto-model.com