MW10

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# Cardiology Patient Simulator K Version II

# Hone your senses and skills for bedside cardiology

See, listen, and feel The cardiology patient simulator K II provides comprehensive hands-on training in cardiology and its complications

#### **Product Supervision:**

Japanese Educational Clinical Cardiology Society, Toshio Amano, Masaya Kino, Takaharu Saito, Tsunekazu Takashina



#### CASES

# (MODE 1) Comprehensive patient simulation with sounds, pulses, apex beats and ECG

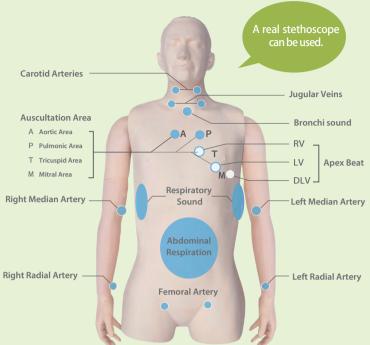
| No.  | Normal heart simulation (12 cases) | No.  | Heart disease simulation (14 cases) | No.  | Arrhythmia (10 cases)                 |
|------|------------------------------------|------|-------------------------------------|------|---------------------------------------|
| A-01 | S2 split (-) HR: 60                | B-01 | aortic stenosis                     | C-01 | sinus arrhythmia                      |
| A-02 | S1 split (+)                       | B-02 | mitral regurgitation                | C-02 | sinus tachycardia                     |
| A-03 | S2 split (+)                       | B-03 | mitral stenosis                     | C-03 | sinus bradycardia                     |
| A-04 | S2 wide split                      | B-04 | aortic regurgitation                | C-04 | ventricular premature contraction (1) |
| A-05 | S3 gallop                          | B-05 | hypertrophic cardiomyopathy         | C-05 | ventricular premature contraction (2) |
| A-06 | S4 gallop                          | B-06 | mitral steno-regurgitation          | C-06 | ventricular premature contraction (3) |
| A-07 | pulmonic ejection sound            | B-07 | pulmonic valvular stenosis          | C-07 | sino-atrial block                     |
| A-08 | S3 and S4 gallop                   | B-08 | atrial septal defect                | C-08 | atrio-ventricular block               |
| A-09 | innocent murmur                    | B-09 | ventricular septal defect           | C-09 | atrial fibrillation                   |
| A-10 | midsystolic click sound            | B-10 | tricuspid regurgitation             | C-10 | atrial flutter                        |
| A-11 | S2 split (-) HR: 72                | B-11 | acute mitral regurgitation          |      |                                       |
| A-12 | S2 split (-) HR: 84                | B-12 | patent ductus arteriosus            |      |                                       |
|      |                                    | B-13 | mitral valvular prolapse            |      |                                       |
|      |                                    | B-14 | dilated cardiomyopathy              |      |                                       |

# (MODE 2) Arrhythmia simulation, auscultation training with ECG

| Α    |                     | В    |                     | C    |                  | D    |                     |
|------|---------------------|------|---------------------|------|------------------|------|---------------------|
| A-01 | normal sinus R      | B-01 | atrial flutter      | C-01 | VVI pacemaker    | D-01 | vpc (quadrigeminy)  |
| A-02 | sinus tachycardia   | B-02 | av block            | C-02 | atrial pacemaker | D-02 | vpc (trigeminy)     |
| A-03 | sinus arrhythmia    | B-03 | av block & crbbb    | C-03 | vent pacemaker   | D-03 | vpc (bigeminy)      |
| A-04 | apc solitary        | B-04 | av block (digial)   | C-04 | av seq pacemaker | D-04 | vpc (couplet)       |
| A-05 | apc bigeminy        | B-05 | av block (mobitz)   | C-05 | icrbbb           | D-05 | pvc (repetitive)    |
| A-06 | ectopic pacemaker   | B-06 | av block (mobitz)   | C-06 | crbbb            | D-06 | pvc (R-on-T type)   |
| A-07 | wondering pacemaker | B-07 | av block (3:1&4:1)  | C-07 | clbbb            | D-07 | non-sustained VT    |
| A-08 | coronary sinus R    | B-08 | av & crbbb          | C-08 | clbbb            | D-08 | vent tachycardia    |
| A-09 | sinus bradycardia   | B-09 | paroxy atr tachy    | C-09 | clbbb (by ami)   | D-09 | vent flutter        |
| A-10 | ss syndrome         | B-10 | av junc R(svst)     | C-10 | wpw syndrome     | D-10 | vent fibrillation   |
| A-11 | atrial fibrillation | B-11 | av junc R (pat)     | C-11 | wpw syndrome     | D-11 | vent R (sinus cond) |
| A-12 | atrial flutter      | B-12 | av junc R           | C-12 | wpw syndrome     | D-12 | accel vent rhythm   |
| A-13 | atrial flutter fib  | B-13 | ac junc contraction | C-13 | vpc (solitary)   | D-13 | agonal rhythm       |

# Physical findings of Simulator K Version II

Comprehensive Clinical Examination Training



#### **Heart Sounds and Murmurs**

Auscultation synchronized with electrocardiograms and

- -differentiation of S1, S2, S3 and S4
- -distinction between systolic and diastolic murmurs

#### **Pulse examination**

Slight variations of the arterial pulse waves under different cardiac conditions or arrhythmias can be detected by pulse examination

# **Observation of Jugular Veins**

The strength and timing of " $\alpha$ " and "V" waves vary with cases

### **Palpation of Apex Beat**

Simulated RV, LV and DLV can be palpated

#### **Monitoring Screen**

Real time dynamic charts on the screen:

- -phonocardiogram
- -sphygmogram (CAP/JVP/AC)
- -electrocardiogram (ECG)

### **Respiratory Sounds and Abdominal Movement**

Respiratory cycles are represented to understand respiratory conditions

### **Up to 5 Simulators at One Time**

OSCE, group session, and scenario-based simulation



Up to five cardiology simulated cases can be controlled by one wireless tablet. Different conditions can be set in each simulator

The system allows for:

- scenario-based training involving more than one patient
- skills assessment sessions with different cardiovascular stations

# **Playlist System**

Simulator "K" is not just for individual task training The incorporated "Play List Maker" facilitates creation of scenario-based training sessions with conditions that vary over time

#### **Playlist Maker facilitates:**

- sessions with temporal change in physical findings
- standardization of training contents among different instructors
- saving time for preparation

#### Readv-to-use

Simple connection and all-in-one unit structure

#### **Error Indicator**

The error indicator performs check-up of the system to keep Simulator K in its best condition

#### SPECIFICATIONS

Size: W145 x D75 x H170 cm / W57 x D30 x H70 in. Weight: 145kg/320lbs

Power: AC100V-240V 50/60Hz Power Consumption: 400W

# MATERIALS

Soft resin, hard resin Latex free

## **DESCRIPTIONS I**SET INCLUDES

1 main unit with the model body

- external speaker (built-in)
- PC / keyboard / mouse (built-in)
- air compressor unit (built-in)
- 1 main monitor

- 1 tablet
- rib sheet
- 1 storage cover
- textbooks
- 2 instruction manuals
- -built-in help file of software operation -instruction manual

<sup>\*</sup> A stethoscope is not included.