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Manufacturer's Note

Please read the instruction carefully before use.

● Before Use

MW12 EAR Examination II has been developed for the training of medical professionals only. Any other use, or any use not in accordance with the enclosed instructions, is strongly discouraged. The manufacturer assume no responsibility for any accident or damage resulting from such use. Should you have any questions on this simulator, please feel free to contact our distributor in your area or KYOTO KAGAKU at any time. (Our contact address is on the back cover of this manual)

● Product Features

The New Ear examination Simulator II is designed to acquire safe and reliable skills in the examination of the external acoustic meatus and tympanic membrane with a direct otoscope. The model warns against painful insertion.

Skills to be learned includes: safe use of an otoscope, differentiation of typical ear problems and earwax/foreign body removal.

- Warning against painful insertion with or without beep
 - self-learning mode (with a beep)
 - instructor mode (silent)
- Major 9 cases are prepared (includes 1 normal)
- Quick switching between cases
- 2 sizes of ear canals (normal and stenosis)
- Anatomically correct soft ear model that allows training in straightening the auditory canal by pulling the auricle
- Training with a real otoscope
- The manikin neck can be tilted
- Training is possible with both left and right ears



DOs and DON'Ts

DOs

Handle With Care

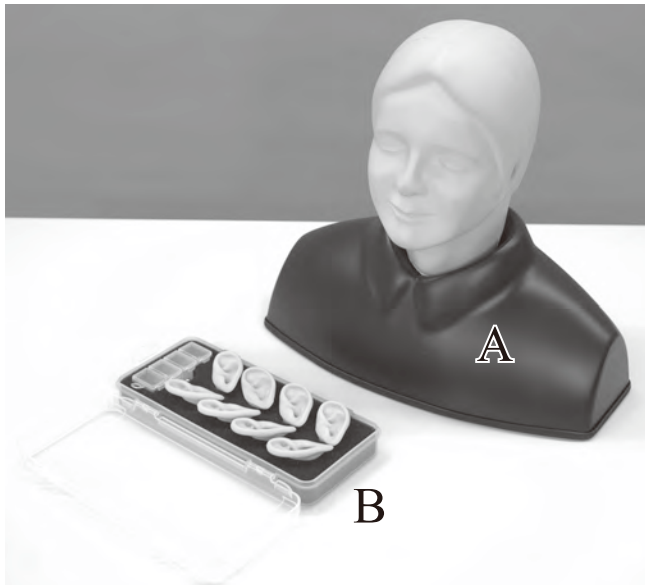
- The materials for the models are a special composition of soft resin. Please handle with the utmost care.
- Use a specular of recommended size: Size 4.
- Ensure the direction of the batteries.
- Store the simulator in the case at room temperature. Keep away from heat, moisture, and direct sunlight.
- For cleaning, wipe the mannequin with a soft cloth which has been moistened with water or alcohol. After drying the manikin, please dust the head with baby powder.

DON'Ts

- Do not insert an otoscope too deep, as this may cause damage to the eardrum.
- Do not rotate the switch dial too quickly, as this may cause mechanical trouble in the system.
- Do not ever wipe the simulator with thinner or organic solvent.
- Do not mark on the simulator models with pen or leave any printed materials in contacted with the surface. Ink marks on the models will not be removable.

Set Includes

Before your first use, ensure all components listed below are included in the unit.



● Set includes

- 1 manikin head and shoulder
- 4 types of ear units – 1 pair each
 - Exam Ear (normal)
 - Exam Ear (stenosis)
 - FB Ear (normal)
 - FB Ear (stenosis)
- 1 set of foreign body removal kit
 - simulated ear wax, small toy, small sponge fragments and a spoon
- 2 AA batteries
 - AA Batteries included are to check if the model works correctly.

Specifications

manikin size: approx. 42×21×38cm, 1.5kg

*Type of the ear is marked on the rear surface of each ear lobe.



Type	Mark
-Exam Ear (normal)	L/R 1
-Exam Ear (stenosis)	L/R 2
-FB Ear (normal)	L/R 3
-FB Ear (stenosis)	L/R 4

● Replacement Parts

11391-010 accessories for MW12



- 4 types of ear units – 1 pair each
 - Exam Ear (normal)
 - Exam Ear (stenosis)
 - FB Ear (normal)
 - FB Ear (stenosis)

- 1 set of foreign body removal kit
 - simulated ear wax, small toy, small sponge fragments and a spoon

11391-010-D accessories for MW12



Preparation

Preparation

Setting of the ears

To ensure the procedure of attachment and detachment of the ear, refer to the movie before using the model. The movie address is as follow and you can find the movie with the right QR code.

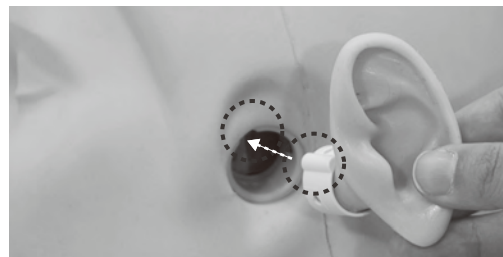
(<https://youtu.be/2G4MPw1V9qI>)



Insert the ear into the opening as shown in the photo below.

Ensure to orient the ear so that the sliding guides on the ear unit and the wall of the opening match together.

To detach the ear, please grasp gently around the base of the pinna and pull straightout, perpendicularly to the head.



Please note

- Please note: Do not mix-up the different types of ears for different trainings:
Examination with an otoscope: Use "Exam Ear"s (mark 1 or 2).
Foreign body removal: Use "FB Ear"s (mark 3 or 4).
- After insert the ear, turn on power.
In case that the ear is inserted on powered of the model, sensors may be working, and may be alerted. When alert is not terminated, once turn off the power and then turn on.
 - Continuous sound --- Turn off the power and then turn on.
 - Intermittent tone --- It is necessary to adjust the position of the ears. Insert your finger into ear canal and push the ear in more deeply.

Setting of the batteries

The battery box is at the back of the shoulder unit.

With pushing the tab at the right side of the lid to the left, pull it to open the lid.

Set two size AA batteries in the box. Ensure the direction of the batteries. The position of positive or negative electrodes is indicated in the box.

After setting the batteries, close the lid as the following procedure. Put the two small tabs at the left side of the lid to the indents at the left side of the battery box then push the lid to close.

Turn on the power switch when training session begins.



Training Sessions

Set the case for training



The cases can be switched over by the switch dial. The number appears in the window indicates the chosen case. Refer the table on the quick manual. To practice foreign body removal, set the dial to "FB" and set the "FB Ear" type of external ears. Otherwise, you may damage the ear drum images.

Warning against painful insertion

The tip of the instrument is localized by sensors and harmful insertion is warned by a beep (self-learning mode), or lamps (instructor mode).

-When the tip of the instrument passes bony part of the ear canal:
yellow warning lamp and intermittent beep

-When the tip of the instrument reaches eardrum:
red warning lamp and a continuous beep

*To stop the continuous beep, turn off the power switch.



Set the training mode

Training mode can be set by the mode change switch on the back of the shoulder part.

1. Self-learning mode: warning with sounds
2. Instructor/examination mode: warning with lamps only



Trouble shooting:

If the tip of the instrument is clearly in the "warning" zone, and no warning indicator works, 1) ensure that the power switch is on, then if necessary 2) replace the batteries with new ones.

Training Sessions

After the training

Training Sessions



Flexible neck and ear

The neck can be tilted to simulate positioning of patient's head.
The soft and supple ear allows training in straightening the canal by pulling the ear lobe.



Be sure to use "FB" type external ears.

Put the included ear wax, small toy or a sponge in the ear canal by a small spoon.
Then set the ears to the head.

Ensure to switch the case switching dial to "FB".

After Training

After use:

Remove all the simulated ear wax, small toys and sponges from the FB Ear.

Remove the batteries from the box and store them separately.

For cleaning, wipe the surface of the manikin and ear models with soft cloth moistened with water or alcohol. Dry the manikin naturally and dust the surface with talcum powder.

Do not expose the manikin and accessories to high temperature and high humidity.