

⚠ Caution | Do not mark on the model and other components with pen nor leave printed materials contacted on surface.
Ink marks on the models cannot be removed.



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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

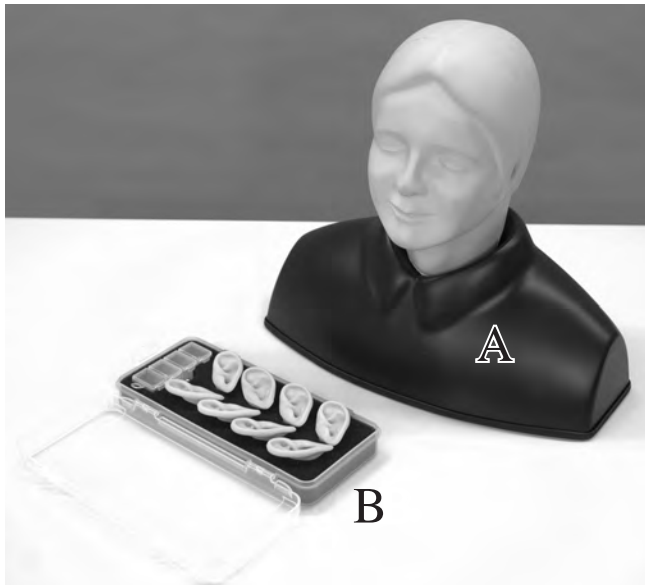
- The materials for the models are a special composition of soft resin. Please handle with the utmost care.
- Use a specular of recommended size: Size 4.
- Ensure the direction of the batteries.
- Store the simulator in the case at room temperature. Keep away from heat, moisture, and direct sunlight.
- 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 contact 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

Specifications

manikin size: approx. 42x21x38cm, 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

Preparation

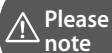
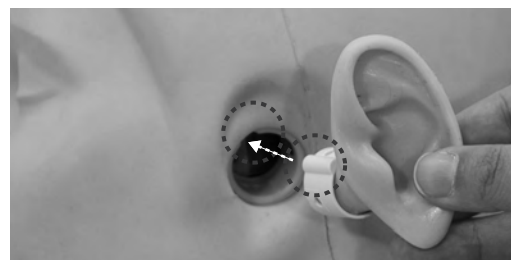
Preparation

Setting of the ears



Choose a pair of external ears that fits the intended training scenario. 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

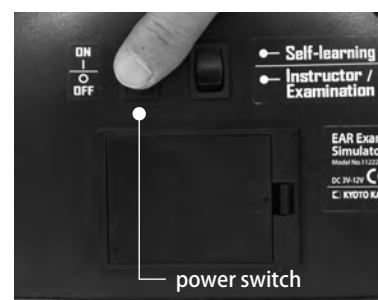
Please note: Do not mix-up the different types of ears for different trainings:
Examination with an otoscope: Use "Exam Ear"s (mark 1 or 2).
Foreign body removal: Use "FB Ear"s (mark 3 or 4).

Setting of the batteries



The battery box is at the back of the shoulder unit. Push the tab at the right side of the lid to the left and then 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, replace the lid. Put the two small tabs 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.



Please note: Use size AA batteries and ensure direction of them.

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

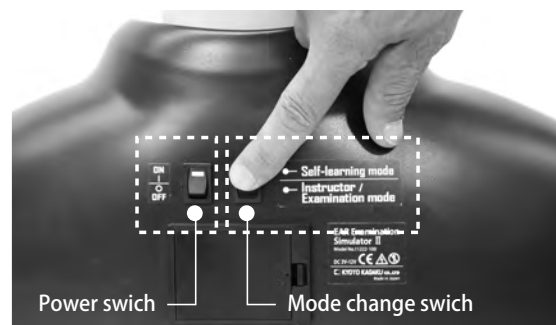
*To stop the continuous beep, turn off the power switch.



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.



Caution

Don't mark on the model and other components with pen or leave printed materials contacted on their surface.
Ink marks on the models will be irremovable.

For inquiries and service, please contact your distributor or KYOTO KAGAKU CO., LTD.



注意

モデル表面に印刷物などが直接触れないようにして下さい。
樹脂表面にインクが吸収されて消えなくなります。

本製品についてのお問い合わせや不具合等ございましたら、お手数ですがお買い上げの販売店、もしくは下記（株）京都科学まで御連絡ください。

■ Nine sets of cases and setting number

■ 9セットの症例と設定番号

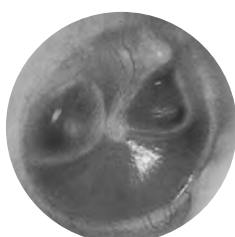
1.normal

1. 正常鼓膜



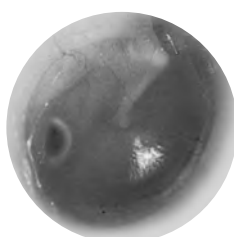
2.serious otitis media(SOM)

2. 中耳炎（漿液性）



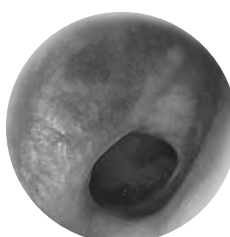
3.mucoïd otitis media(MOM)

3. 中耳炎（粘液性）



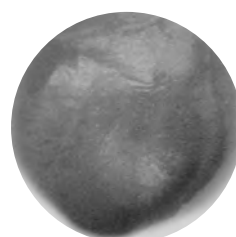
4.chronic otitis media with perforation

4. 中耳炎（慢性穿孔性）



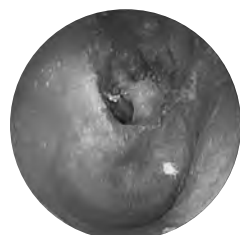
5.acute suppurative otitis media(AOM)

5. 中耳炎（急性化膿性）



6.cholesteatoma

6. 真珠腫



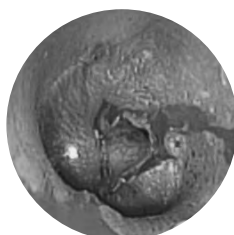
7.tympanosclerosis

7. 鼓室硬化症



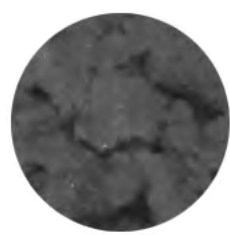
8.traumatic perforations

8. 外傷性鼓膜穿孔



9.cerumen block

9. 耳垢閉塞



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Please contact manufacturer for extra copies of this manual which may contain important updates and revisions.

Please contact manufacturer with any discrepancies in this manual or product feedback. Your cooperation is greatly appreciated.

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