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
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.

DOs and DON’Ts

**DOs**

**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.
Before you start

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. 42×21×38cm, 1.5kg

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

<table>
<thead>
<tr>
<th>Type</th>
<th>Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam Ear (normal)</td>
<td>L/R 1</td>
</tr>
<tr>
<td>Exam Ear (stenosis)</td>
<td>L/R 2</td>
</tr>
<tr>
<td>FB Ear (normal)</td>
<td>L/R 3</td>
</tr>
<tr>
<td>FB Ear (stenosis)</td>
<td>L/R 4</td>
</tr>
</tbody>
</table>

- 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

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 straight out, perpendicularly to the head.

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: 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).

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

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ください。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）京都科学までご連絡ください。

Nine sets of cases and setting number

1. normal
2. serious otitis media (SOM)
3. mucoid otitis media (MOM)
4. chronic otitis media with perforation
5. acute suppurative otitis media (AOM)
6. cholesteatoma
7. tympanosclerosis
8. traumatic perforations
9. cerumen block

KYOTO KAGAKU CO., LTD

URL: http://www.kyotokagaku.com e-mail: rw-kyoto@kyotokagaku.co.jp

Main Office and Factory
15 Kitanekoya-cho Fushimi-ku Kyoto 612-8388, Japan
Telephone: 81-75-605-2510
Facsimile: 81-75-605-2519

LA Office (for North and South American customers)
3109 Lomita Boulevard, Torrance, CA 90505, USA
Telephone: 1-310-325-8860
Facsimile: 1-310-325-8867

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No part of this instruction manual may be reproduced or transmitted in any form without permission from the manufacturer.
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.

株 式 会 社

京都科学

URL: http://www.kyotokagaku.com e-mail: rw-kyoto@kyotokagaku.co.jp

本社・工場
〒612-8388 京都市伏見区北畠小屋町15番地
TEL: 075-605-2510 (直通)
FAX: 075-605-2519

東京支店
〒113-0033 東京都文京区本郷三丁目26番6号
NREG本郷三丁目ビル2階
TEL: 03-3817-8071 (直通)
FAX: 03-3817-8075

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