

Caution:

Don't mark on the phantom with pen or leave printed materials contacted on its surface.
Ink marks on the phantom will be irremovable.

PH-76

Dental Radiography Head Phantom

Production supervision:

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Instruction Manual



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This product is developed for dental X-ray photography training and X-ray cephalographic image quality control.

This product is intended to be used for medical training. Do not use for other than the intended purpose. We disclaim any liability for breakage of the product and/or incident in the case when you use this product without following the instruction described in this manual.

Read the instruction carefully before use.

Set includes

Before your first use, please ensure that you have all components listed below.



Set includes:	a main head unit	1	e fixation base (including screws)	1
	b upper jaw (alveolar bone)	1	f tripod	1
	c lower jaw (alveolar bone)	1	g aluminum storage case	1
	d tongue	1		

Materials: Synthetic skull, teeth and cervical vertebrae: epoxy based resin
Soft tissue: Urethane based resin (SZ-50)

Phantom size: approx.20×21×25cm
Phantom weight: approx.4.8kg height

Specifications are subject to change.

⚠ DOs and DON'Ts

DO s

Handle with care

The materials for phantom and models are special composition of soft resin. Please handle with care at all times.

Cleaning and care

Please clean the phantom completely every time after you finish the training.
The remaining lubricating gel may deteriorate the phantom.

Keep the training set at room temperature, away from heat, moisture and direct sunlight.

DON'Ts

Never wipe the phantom or models with thinner or organic solvent.

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

Please note: The color of the phantom may change over time, though, please be assured that this is not deterioration of the material and the ultrasonic features of the phantom stay unaffected.

This phantom has a thin layer of coating for protective purposes which may cause minor wrinkling. However, it has no effect on the ultrasound image.

1 Features • Training items

● Features

- This product reproduces the X-ray absorption of the hard tissues (enamel, dentin, cortical bone, and cancellous bone) based on the Hounsfield value.
- Because the mandible and the maxillary alveolar bone are detachable, this product allows you to access the oral cavity, pharyngeal cavity, and maxillary sinus and, for example, place simulated lesions.
- Because the carotid artery is reproduced as a lumen, you can insert an object such as a mimic calcium deposit.
- This product accurately reproduces the figures of the dentition, root and pulp cavity.

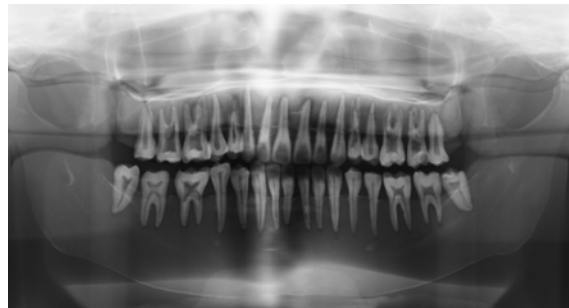
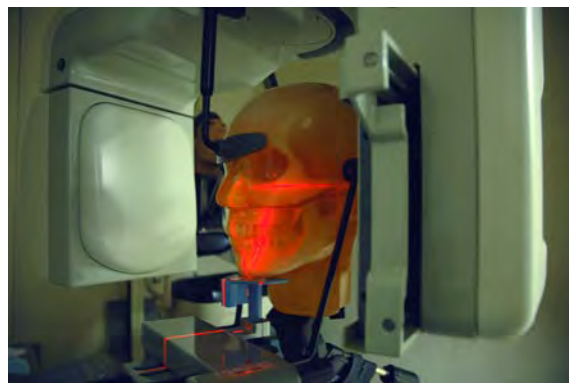
● Training items

- Dental X-ray photography training and quality control.

Radiographic Techniques

- Panoramic X-ray photography
- Intraoral X-ray photography
- Dental CT scanning
- Head X-ray photography including cephalography
- Other techniques

*with closed mouth position



Panoramic X-ray photograph

- The following phenomena caused by certain diseases can be simulated
 - 1) Variance of the intracavity X-ray transparency and calcification in the carotid canal caused by sinusitis maxillaris
 - 2) Ingesta remaining in the oral cavity and the pharyngeal cavity because of dysphagia
 - 3) Thinning patterns of the mandibular inferior cortex caused by osteoporosis*) and others

* The mandibles with cortical bones of different thicknesses are available as optional parts (not included in the standard set).

1 Before training

① Fixing on the tripod

The phantom has a threaded hole in the center of the bottom. You can fix the phantom on a tripod for camera using this hole.



② Disassembly of the components

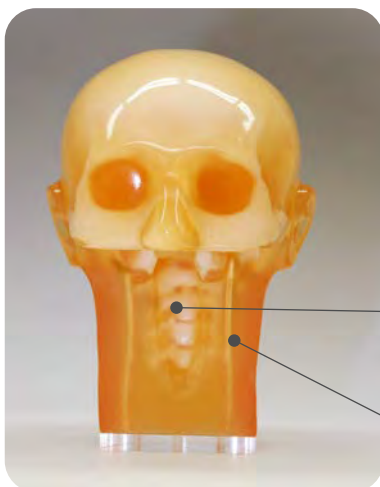
1. Pull the upper alveolar bone forward and remove it.



2. Remove 4 screws that are installed in the bottom of the phantom and detach the round fixation base.



3. Disassembled parts can be individually used for radiography training or assessment. Also you can place simulated lesions in the oral cavity, pharyngeal cavity, maxillary sinus, and carotid canal and then take photographs. For assembly, follow the reverse procedure.



oral cavity
maxillary sinus
carotid canal

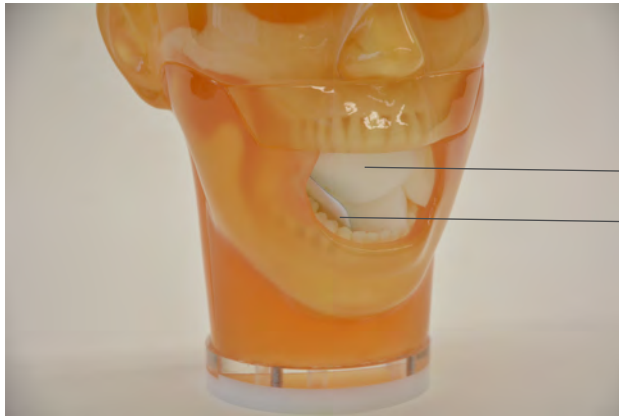


pharyngeal cavity

1 Before training

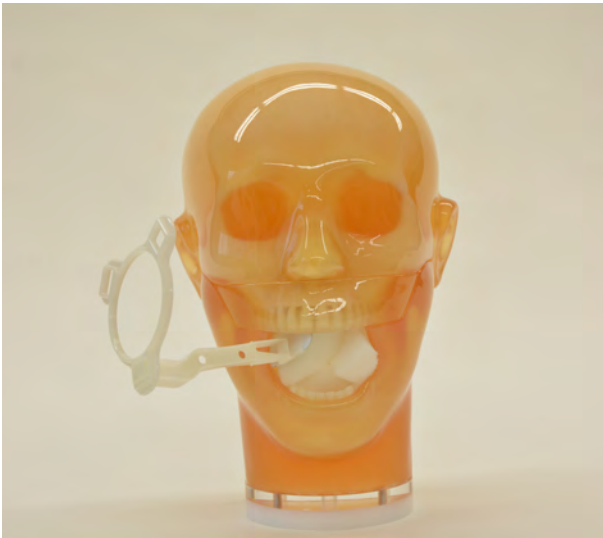
③ Fixing tongue and film

For the open type, the tongue and film are fixed using the attached sponge.
Please cut the sponge into a size that is easy to use.



sponge

film



After training

1 After training

1. Removal of the simulated lesions

Thoroughly remove the simulated lesions that you placed for photography.

2. Assembly of the components

To re-assemble the combine the maxilla and the mandible securely, then place the round fixation base on the bottom of the neck by matching the stepped parts on both sides and fasten the 4 screws to fix it.



3. Wipe off the dust and dirt on the model with a soft cloth that is soaked with water or mild detergent. Then store the model in the aluminum case after the moisture is dried out completely.





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