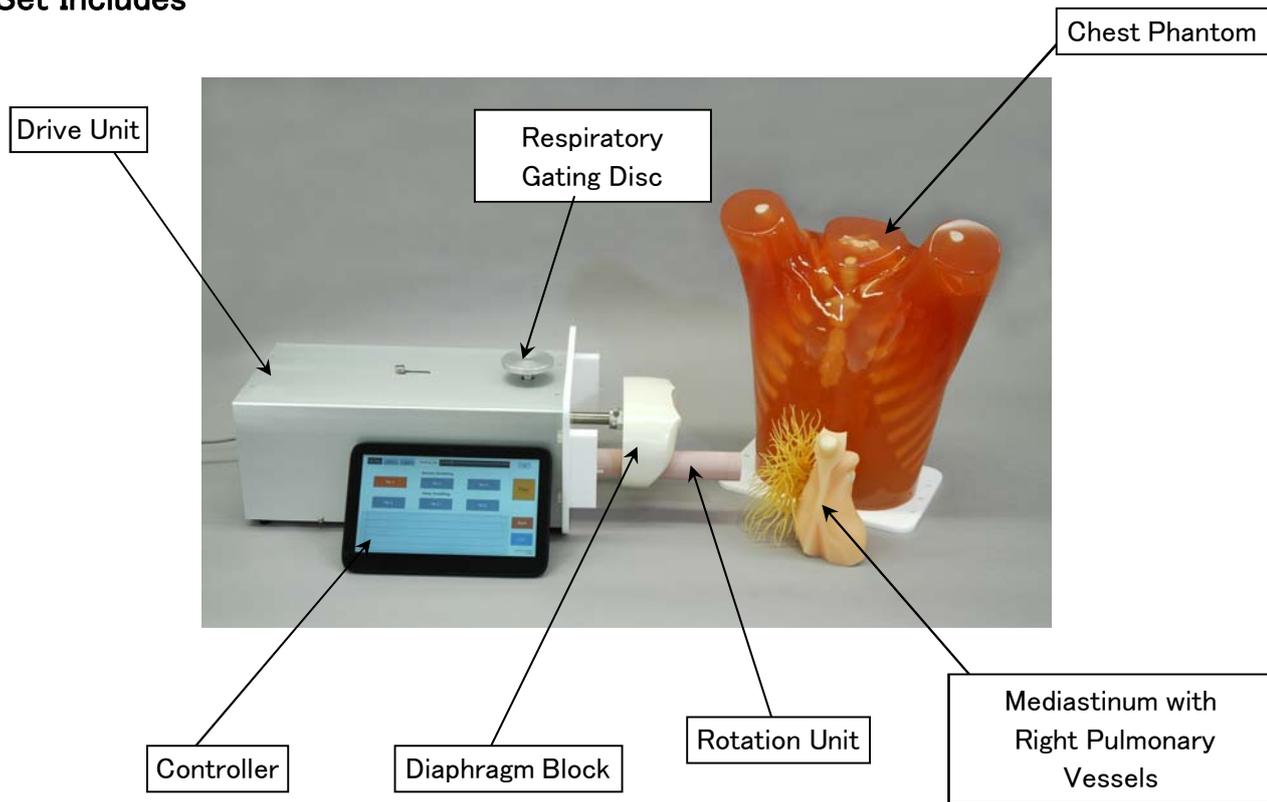


## Thorax Dynamic Phantom



## Set Includes



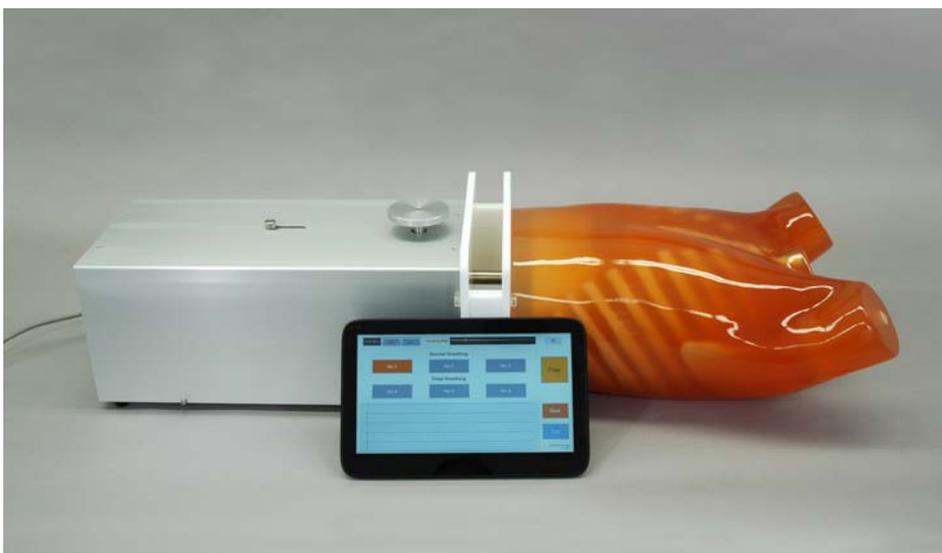
### Accessories:

simulated tumors

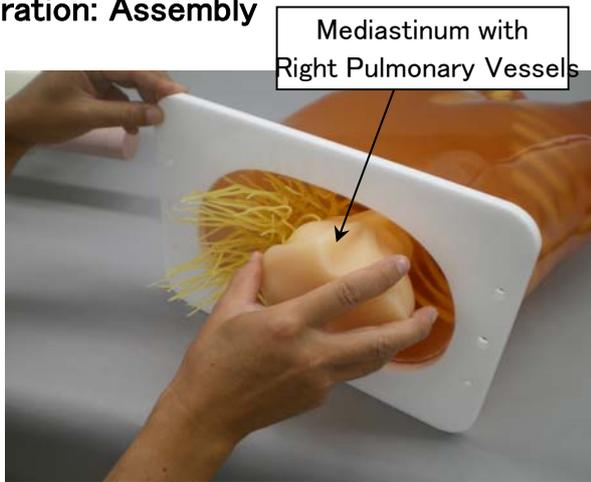
inserts for the rotation unit (three variations)

-This phantom consists of the chest phantom, mediastinum with right pulmonary vessels, rotation unit, drive units.

-Diaphragm block and the rotation unit moves according to the respiration pattern set on the controller.

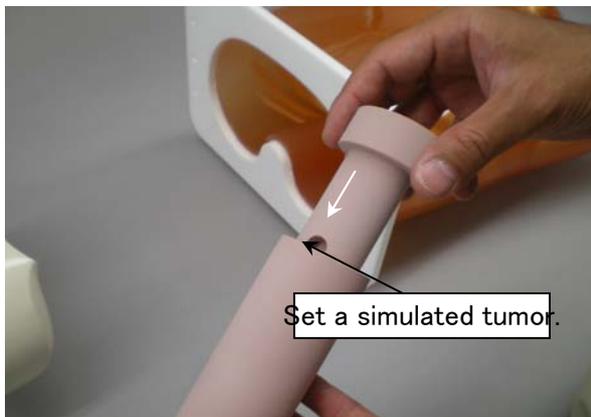


## Preparation: Assembly



1. Insert the mediastinum into the chest phantom.

\*The part is already set when the phantom is delivered.



2. Set a simulated tumor or a TLD in the pit made in the insert for the rotation unit.

Set the insert to the opening of the rotation unit, then attach the rotation unit to the drive unit.

\* Three variations of inserts (once piece each) come with the set:

- for simulated tumors of 3, 5, 8mm dia
- for simulated tumors of 10,12 mm dia
- for TLD (with a pit of 3x 3x 1mm)



3. Lock the rotation unit with a pin.

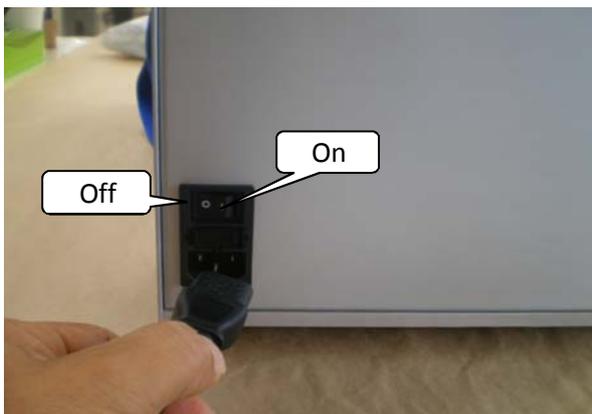
## Preparation: Assembly



- 4 Mount the chest phantom to the drive unit.  
Fix them together with screws.



- 4.Assembly complete.

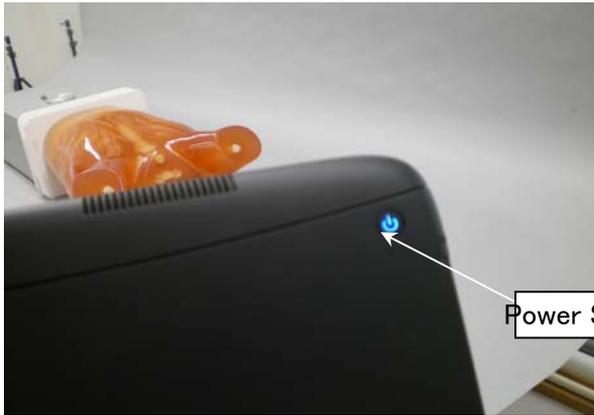


- 5 Connect to the power supply.  
Turn on the power switch

\*Be sure to turn on the power switch on the drive unit, before turning on the controller.



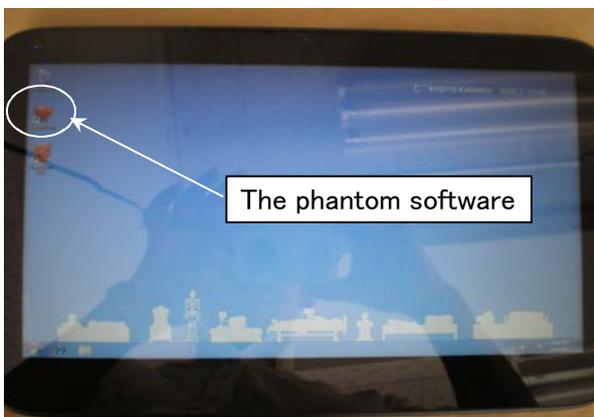
## Turn on the controller



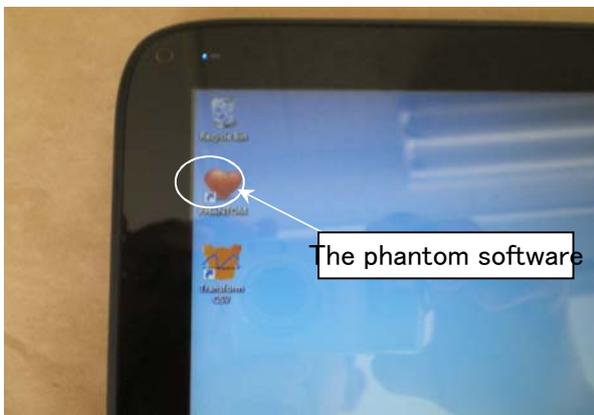
1. Turn on the controller.

\*Power switch for the controller is at the back of the tablet.

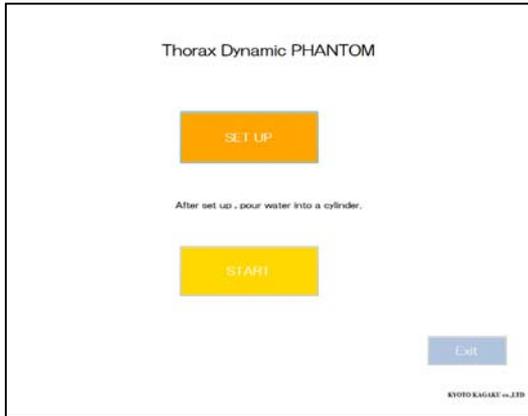
Long press the button until the LED indicator lit.



2 Open the phantom software by double clicking on the icon.



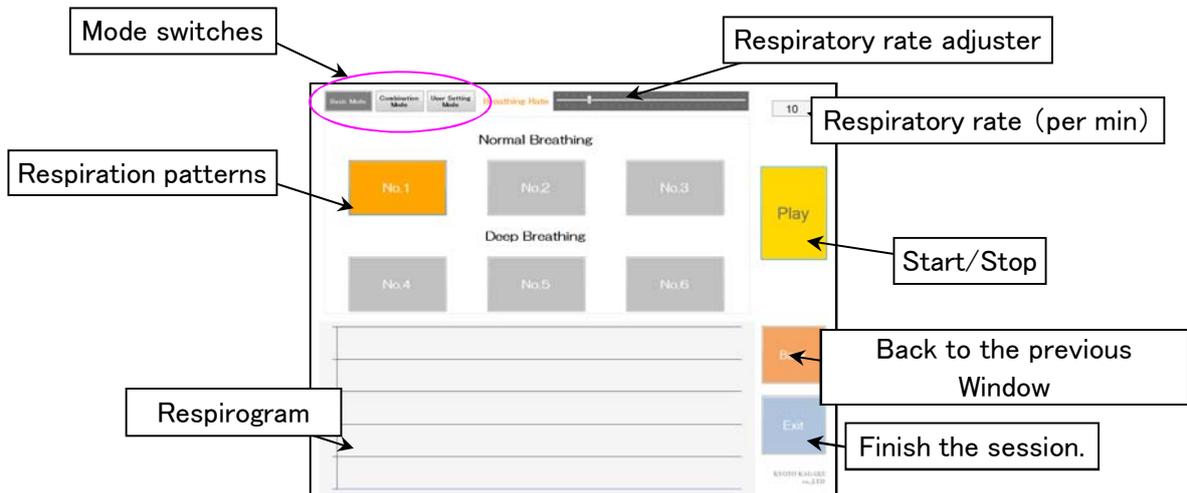
# Operate the phantom



1 Press the set up button to initialize the system.



2 Press the Breath button.

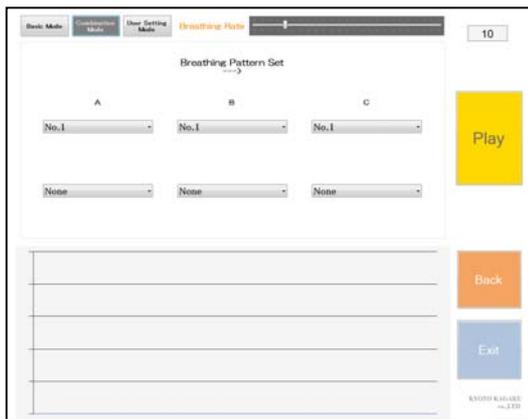


\*Setting can be changed while the phantom is not in motion.



## Basic Mode

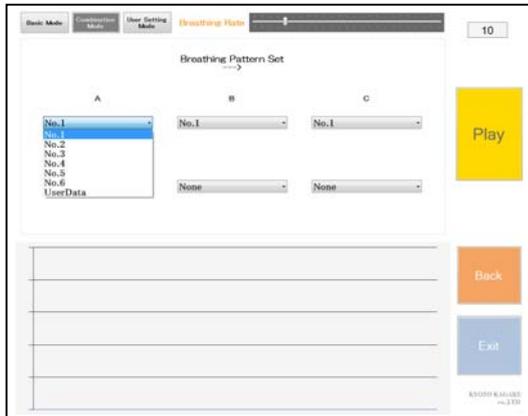
Six preset respiratory patterns can be simulated.



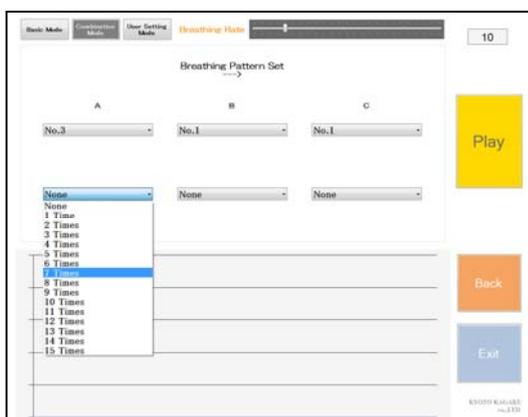
## Combination Mode

Original cases can be created by setting the number of cycles to replay for chosen preset patterns to replay in series.

Up to three preset patterns can be chosen for a combination.



1. Select a respiratory pattern from the pull down list.



2. Choose a number to repeat from the pull down menu.

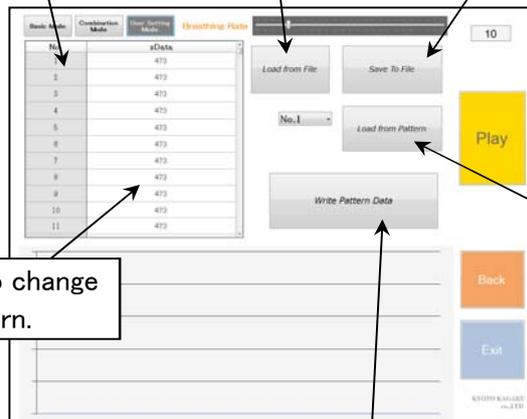
## User Setting Mode

Create original respiratory patterns manually, by modifying preset respiratory patterns.

Total 500 steps.  
1 step represents approx. 0.02sec.  
500 steps represent approx.10 sec.

Load a saved pattern.

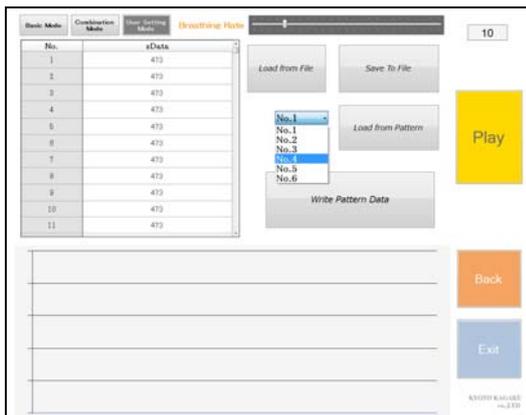
Save the created pattern.



2.Modify the value to change the respiratory pattern.

1. Load a preset respiratory pattern to modify.

3. Send the created pattern to the system.  
\*This process may take several minutes.



- 1 Load a preset pattern
- 2 Modify the balue
- 3 Press "Write Pattern Data"
- 4 Play
- 5 Press "Save To File" to save the new pattern.

## Other settings

Range of the motion of the rotation unit can be adjusted with two adjustment knobs.

Length of a horizontal slide: 38mm–64mm

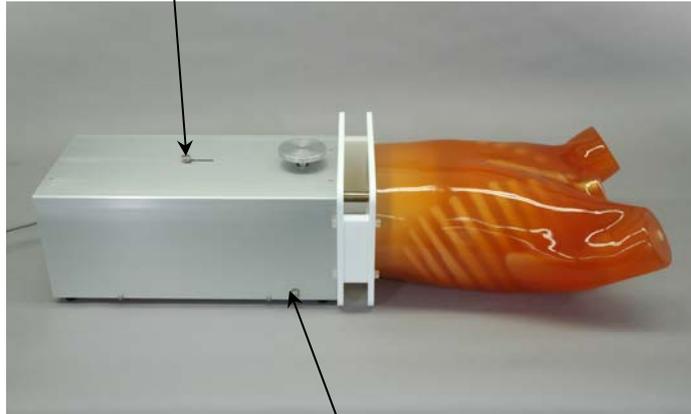
Wides of the rotation angle: 50–70 degrees

*\* maximum movement of the diaphragm block is 38mm.*

Rotation unit motion adjustment knob.

Turn clock wise: reduce the length of the slide. The shortest length is 38mm.

Turn counter clock with: increase the length of the slide. The longest is 64mm



Rotation unit angle adjustment knob

Turn clockwise : Wider rotation upto 70 degrees.

Turn counter clockwise: Narrower rotation to 50 degrees.

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