

PH-6B

Dynamic CT Cardiac Phantom

Instruction Manual

Contents

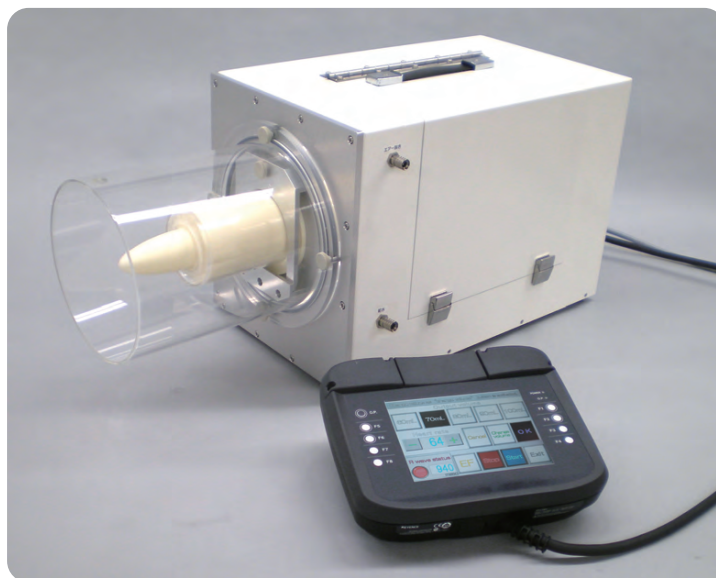
Prease read

Components 1	P.1
Components 2	P.2

Preparation

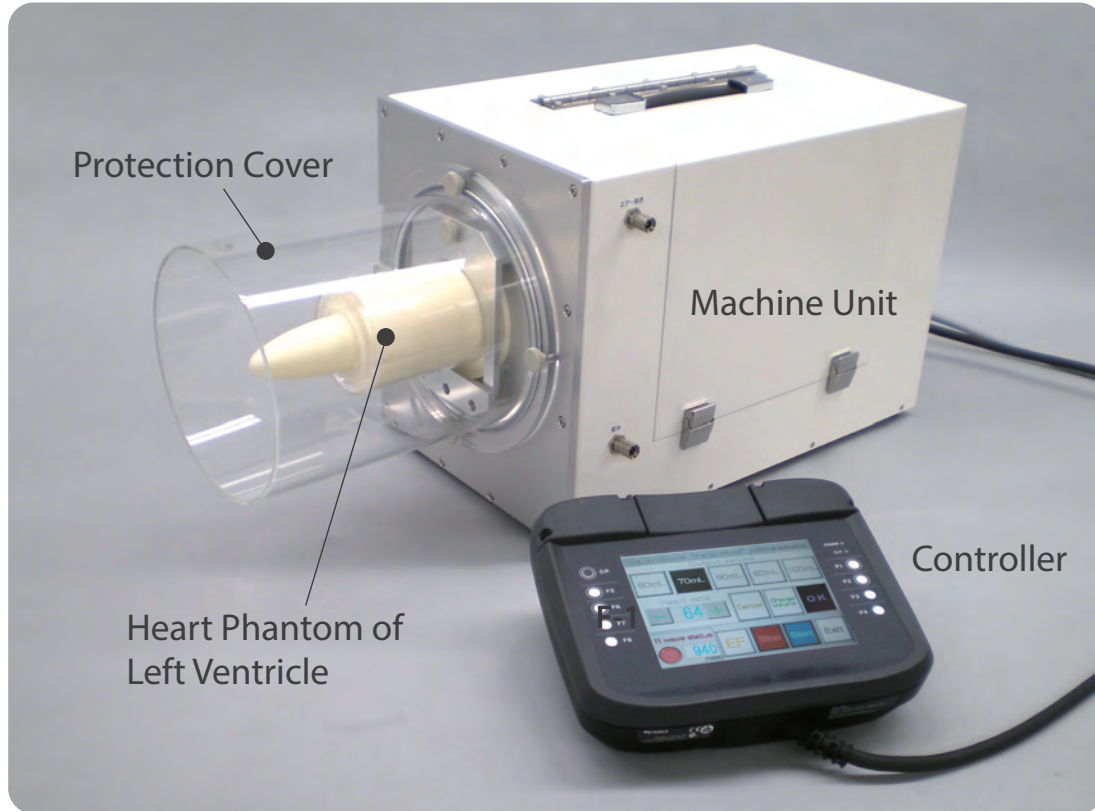
Set-up 1-3	P.3-5
Operation 1-2.....	P.6-7

After the session.....	P.8
------------------------	-----



Set Includes

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



Set Includes	Machine unit	1	Simulated Coronary Arteries
	Heart Phnatom	3	Anatomical Type 1
	Protective Cover	1	Stehosis Type 1
	Ring Holder	5	Normal Type 1
			Storage Case 1

Specs

- 1) Heart Rate:30-120/min
- 2) Ejection volume:60-100mL
- 3) ESV:approx.47.5m L

Materials

Heart Phantom: Polyurethane with Hydroxyapatite (HU value:approx.40)
 Simulated arteries: polyurethane with Hydroxyapatite

- The phantom consists of a machine unit, a heart phantom, a protective cover and a controller
- The heart phantom pulsates by the incorporated pump.
- The phantom generate pulses to simulate ECG gating (1mV, intervals: 60m/sec)
- Simulated coronary arteries can be attached to the heart phantom.

Machine unit and Heart Phantom



Machine unit

ECG leads can be attached to the plates at the rear end of the machine unit. From the left R, L and LF/N respectively. The pulses are fixed at 1mV, 60m/sec.



Inside of machine unit

The lid is to be kept closed except for the time of drainage after use.



Heart Phantom

How to attach simulated artery

First put the ring holder on the heart phantom, and glue them at two points by the instant glue. Interleave the simulated artery between the heart phantom and ring holder as like a photo.

Set-up 1

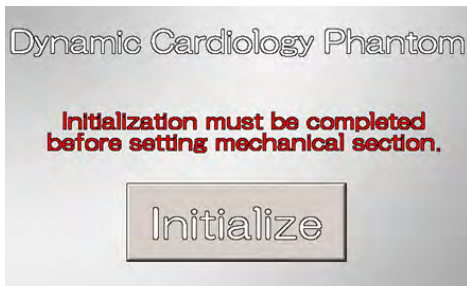


1. Power-on

The power switch is found at the rear end of the machine unit. Turn on the switch.



The port for fuse is found below the power switch.



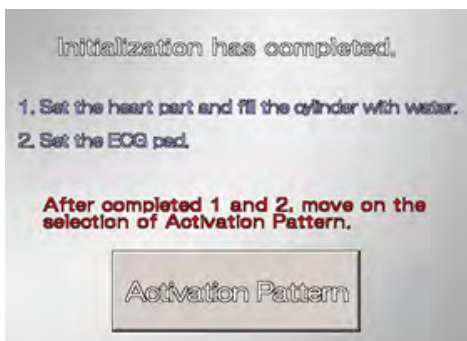
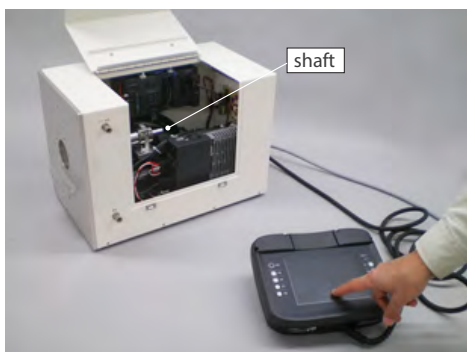
2. Initialization

Press the "initialize" button on the screen of the controller.



Initializing...

At the same time the shaft in the machine unit returns to its default position.



Initialization complete.

The screen changes automatically.

Set-up 2



3. Assembly

First, put the supporting cover over the heart phantom.



Then put them together over the opening on the front wall of the machine unit.



And then, put the ring holder around the base of the phantom and fix it to the machine unit with a screw.

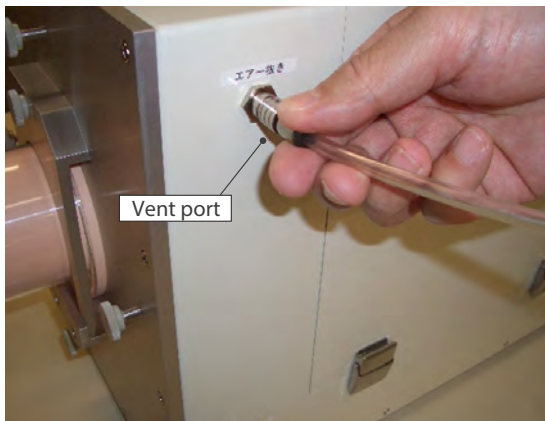


Do not put screws to the phantom unit when the heart phantom is NOT in place. This may cause damage internal structures of the machine.

Set-up 3

4. Fill the heart phantom with water

Connect the tubes to the two ports on the side wall on the machine unit. Ensure open the cocks at the far end of the tubes.



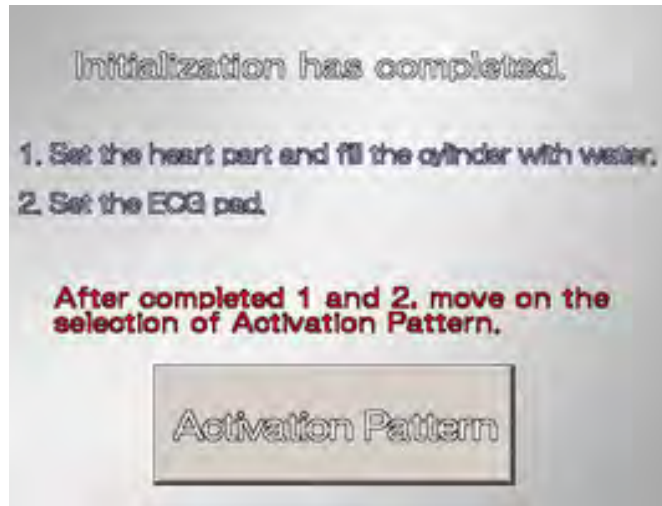
Connect the water-filled syringe to the tube from the irrigation/drain port (lower port). Fill the water until you see water flow out from the vent port.



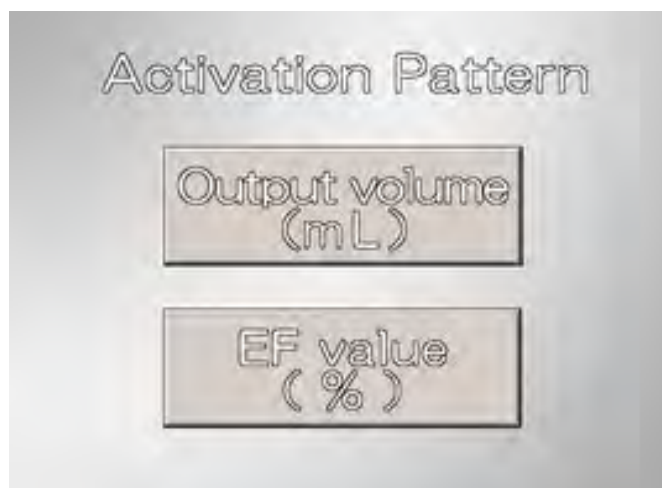
Attach the protection cover and fix it to the wall of the machine unit with four screws.



Operation 1

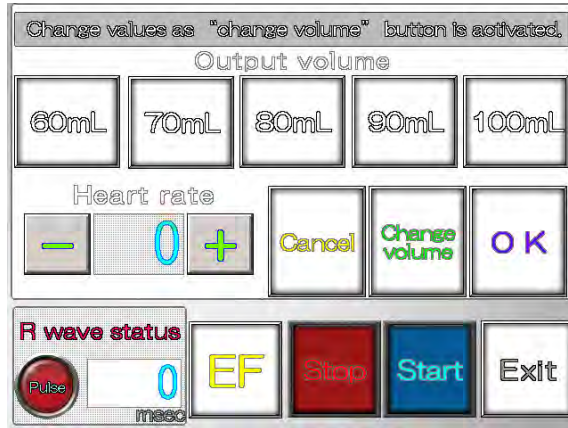


Attach the ECG leads to the panels at the rear wall of the machine unit. Then, press the "activation pattern" button on the screen.



Choose either "output volume" or "EF value" and press the button.

Operation 2



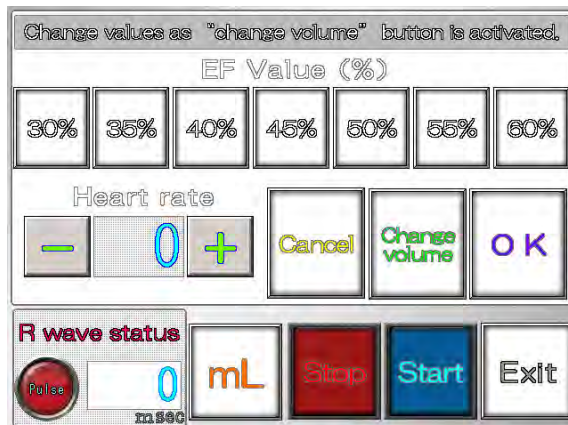
Operation: "output volume" mode

Choose one of the volume buttons and confirm it by pressing OK.
Change the heart rate with -/+ button and confirm with OK button.

Then press "start" to start pulsation.

The volume and the heart rate can be changed by pressing "change value" button and repeat the steps above.

The pulse button at the lower left corner blinks with generation of the pulse.
The motion of the phantom stops by pressing "stop" button.
To move to EF value mode, press "EF" button.
To close the all session, press "exit" button.



Operation "EF value" mode

Choose one of the volume buttons and confirm it by pressing OK.
Change the heart rate with -/+ button and confirm with OK button.

Then press "start" to start pulsation.

The volume and the heart rate can be changed by pressing "change value" button and repeat the steps above.

EF value can be set from 30% to 60% with 5% steps.
Heart rate -EF value 30-45%
can be set at 30-120/min.
-EF value 50-55%
can be set at 30-110/min.
-EF value 60%
can be set at 30-100/min

The volume and the heart rate can be changed by pressing "change value" button and repeat the steps above.

The pulse button at the lower left corner blinks with generation of the pulse.

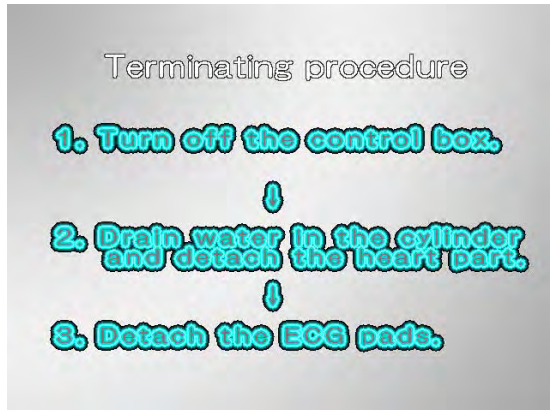
The motion of the phantom stops by pressing "stop" button.

To move to EF value mode, press "EF" button.

To close the all session, press "exit" button.

After the session

After the session

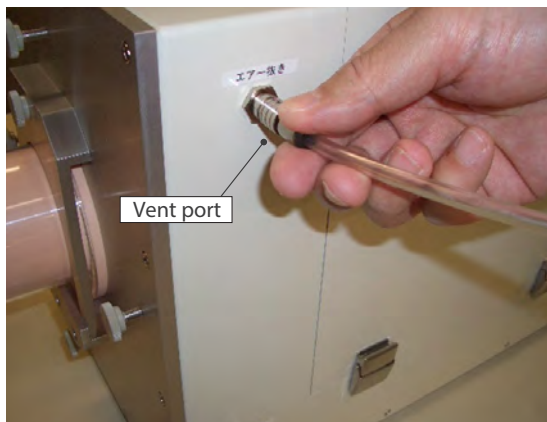


- 1) Press "exit" button.
- 2) Turn off the power switch
- 3) Remove the ECG leads.

- 4) Discharge the water.

Connect the tubes to the two ports on the side wall of machine unit. (Ensure close the cocks at the tubes.) Set up the container underneath to store drainage.

- open the cocks of both tubes.
- water flow out through the tube.
- disconnect the tubes.



Please note

- Ensure to discharge all water from the system before storage.
- The manufacturer cannot be held liable for damages or accidents caused by use not conforming this instruction manual.

■ Main Office and Factory (World Wide)

 **KYOTO KAGAKU co.,LTD**

WEB • www.kyotogagaku.com

E-MAIL • rw-kyoto@kyotokagaku.co.jp

15 kitanekeya-cho Fushimi-ku Kyoto 612-8388, Japan

TEL: +81-75-605-2510

FAX: + 81-75-605-2519

2017.01

■ North and South American regions:

 **KKAmerica**
Kyoto Kagaku America Inc.

WEB • www.kkamerica-inc.com

E-MAIL • info@kkamerica-inc.com

3109 Lomita Boulevard, Torrance, CA 90505-5108, USA

TEL: +1-310-325-8860

(Toll-free in North America: 877-648-8195)

FAX: +1-310-325-8867