
Room Planner for Angiography System Trinias

Manual

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1. Introduction

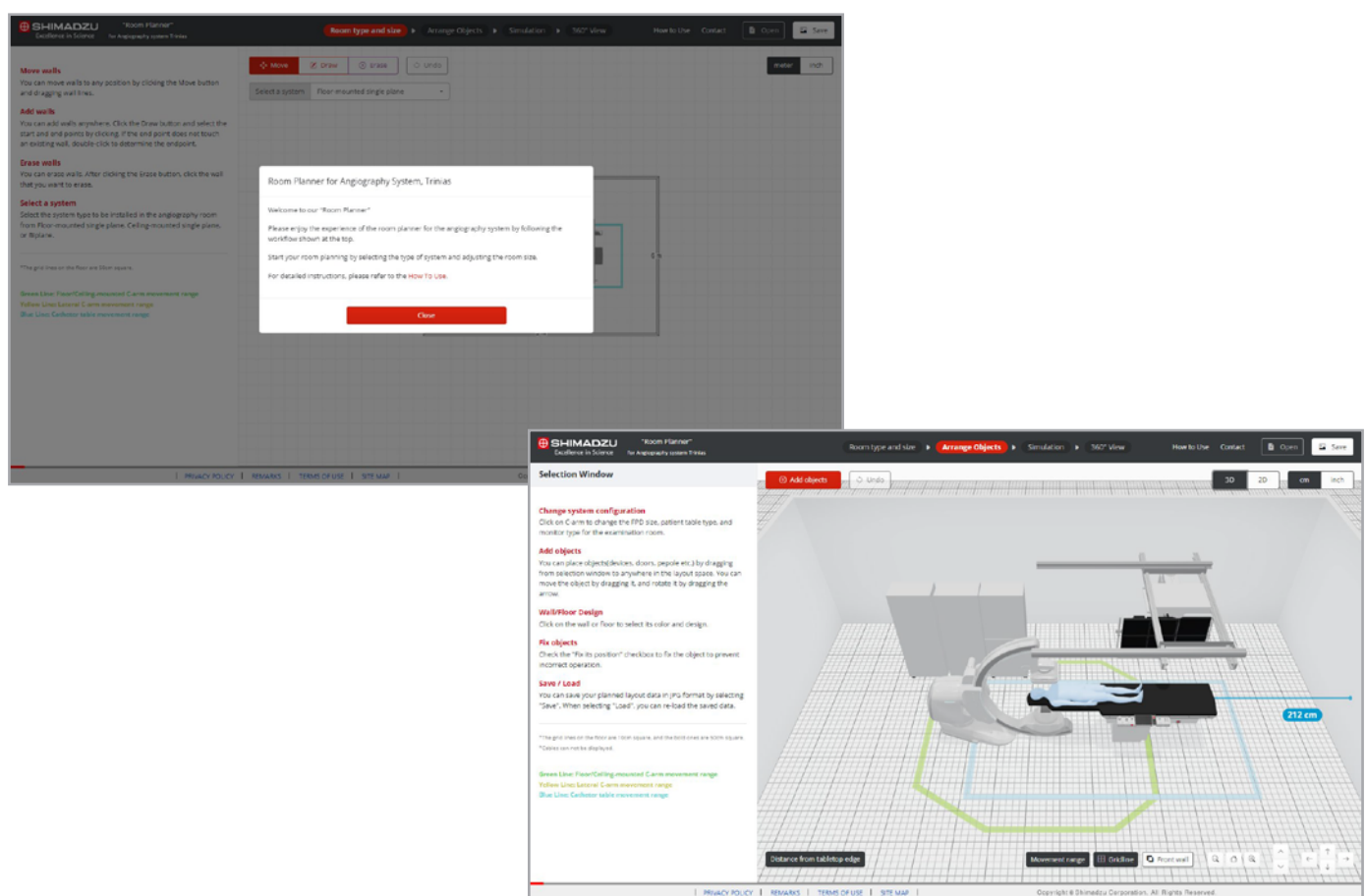
What is "Room Planner"?

Room Planner for Angiography system Trinias is a 3D simulation tool to make it easy to visualize room layout with various C-arm positions.

Room type, size and system configuration can be freely changed, so you can imagine an angiography room that is suited to your facility's clinical needs and actual room size.

*It is designed as close as possible to the actual dimensions and specifications of our angiography system, Trinias series with SCORE Opera as of April 2023, but it shall be used just for a guideline to help you plan a room layout virtually. Accuracy is not guaranteed. It also does not include all the components that come with the actual angiography system. Please refer to engineering drawings for final specifications.

*When installing an angio system, please consult with our sales representatives regarding system configuration including optional accessories.



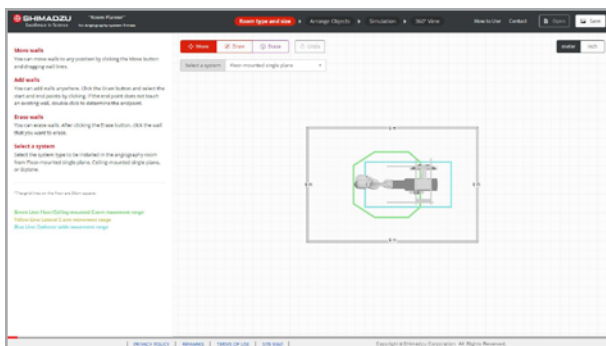
2. Workflow

4 steps

The planning process consists of four steps.

You can go each step back and forth freely, so you can change room sizes and system configurations and simulate system movements at any time.

STEP1 Room type and size



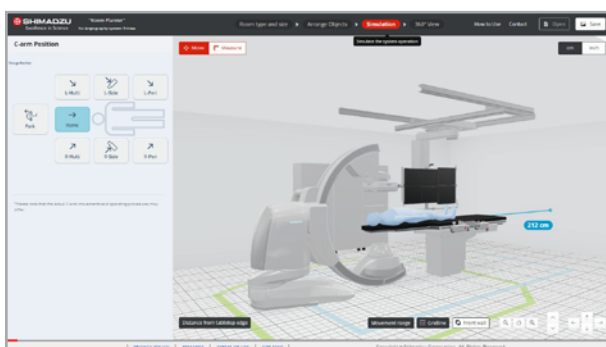
First, select the system type and set the room size. The size of the room can be adjusted by dragging the displayed four walls. You can also change the shape and add rooms by drawing new walls.

STEP2 Arrange objects



The room planned in STEP 1 is displayed. Here, you can examine the layout in more detail, including adding objects or changing system components. View the layout from any angle in 3D space to consider the placement.

STEP3 Simulation



The system movement can be simulated. The C-arm position and the longitudinal position of the patient table can be changed to check if there are any problems with the layout.

STEP4 360° View



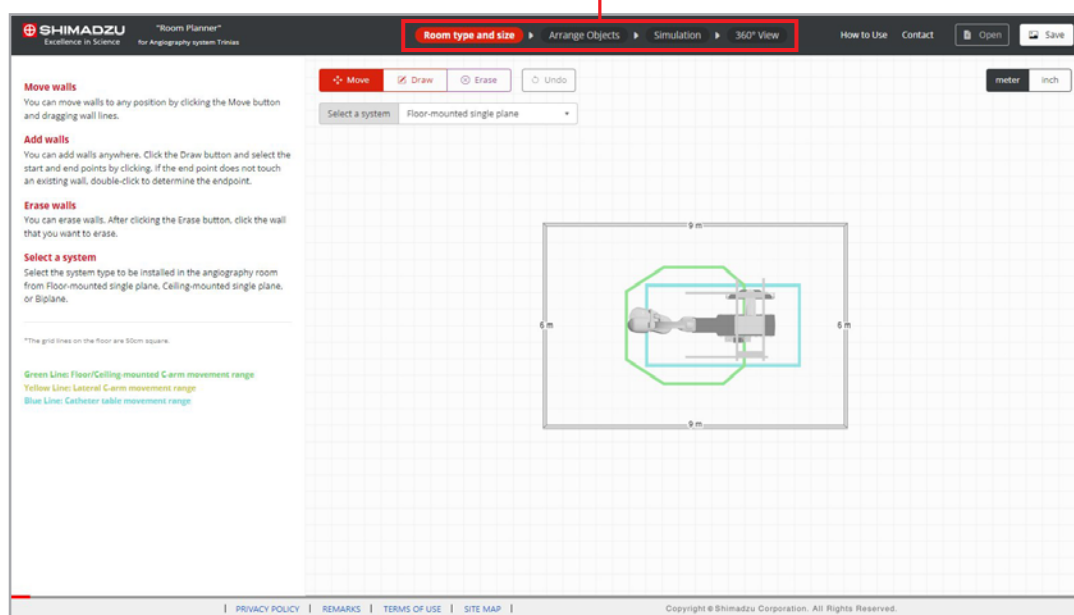
Enjoy a 360-degree walk-through view as if you were in the angiography room created in Steps 1-3. You can check workflow lines and room appearance.

2. Workflow

Switch steps

Click Step buttons to switch steps.

Step buttons



3. Basic Operation

Function of each button

1 Saving and loading the layout

You can save and load the layout data you have planned so far.

Click the "Save" button to save the JPG image to the "Download" folder on your PC.

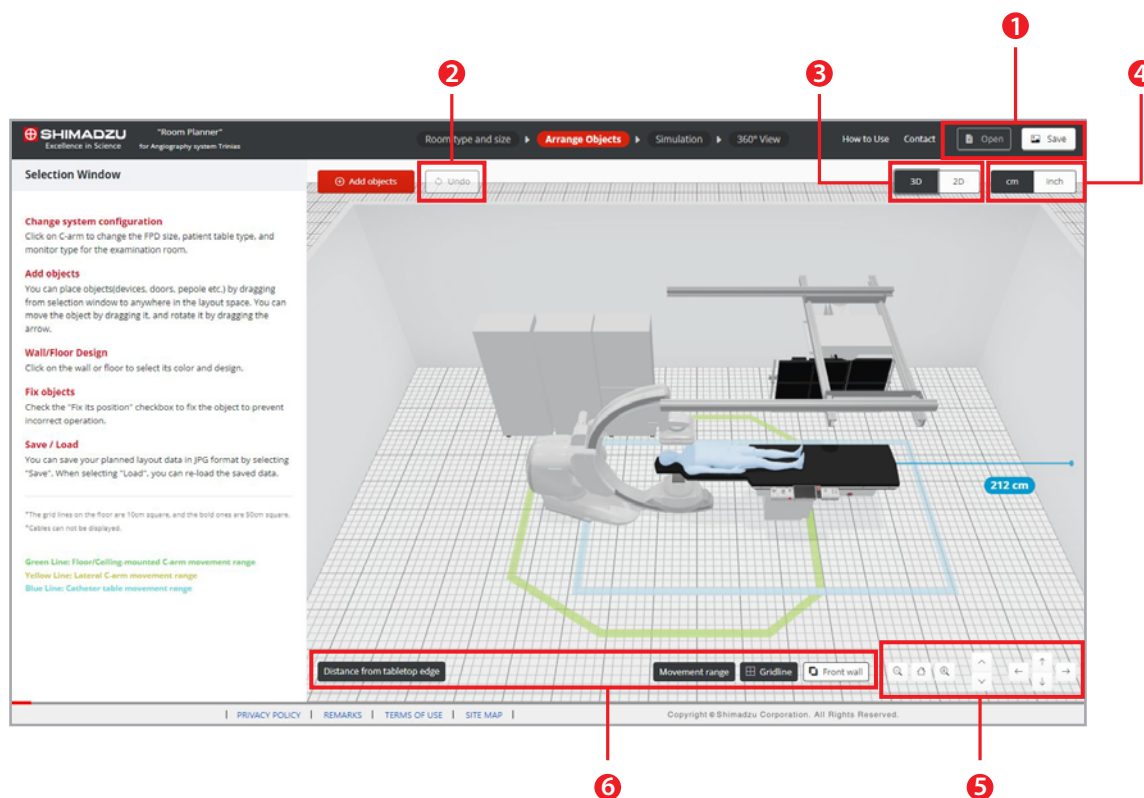
Then, click the "Open" button to load JPG image and restore the layout plan.

2 Undoing the operation

Click the "Undo" button to undo the operation.

3 Switching between 3D and 2D views

You can switch between 3D and 2D views.



4 Switching units

You can switch the unit of length.

5 Adjusting view point

You can adjust the view point of the camera.

6 Switching the indication

Distance from tabletop edge --- You can show/hide the distance from tabletop edge to the wall.

*If an object is placed between tabletop edge and the wall, the distance to that object is displayed.

Movement range ----- You can turn the indication of the C-arm movement range on and off.

Gridline ----- You can turn the indication of the floor gridline on and off.

Front Wall ----- The front wall can be turned on or off.

The front wall is hidden by default, but can be displayed to suit your needs.

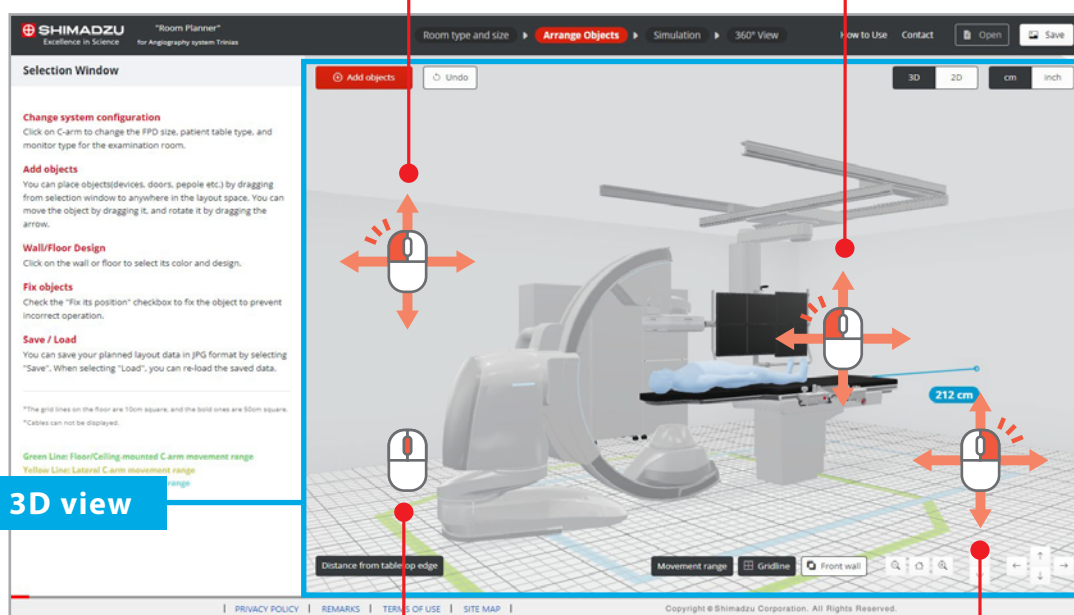
3. Basic Operation

Basic operation of 3D view

Basically all operations are performed with the mouse.

Drag the open space to rotate the viewpoint.

Click to select a system or objects and drag to move it.



Use the mouse wheel to zoom in/out of the 3D view.

Right-click and drag to move the viewpoint.

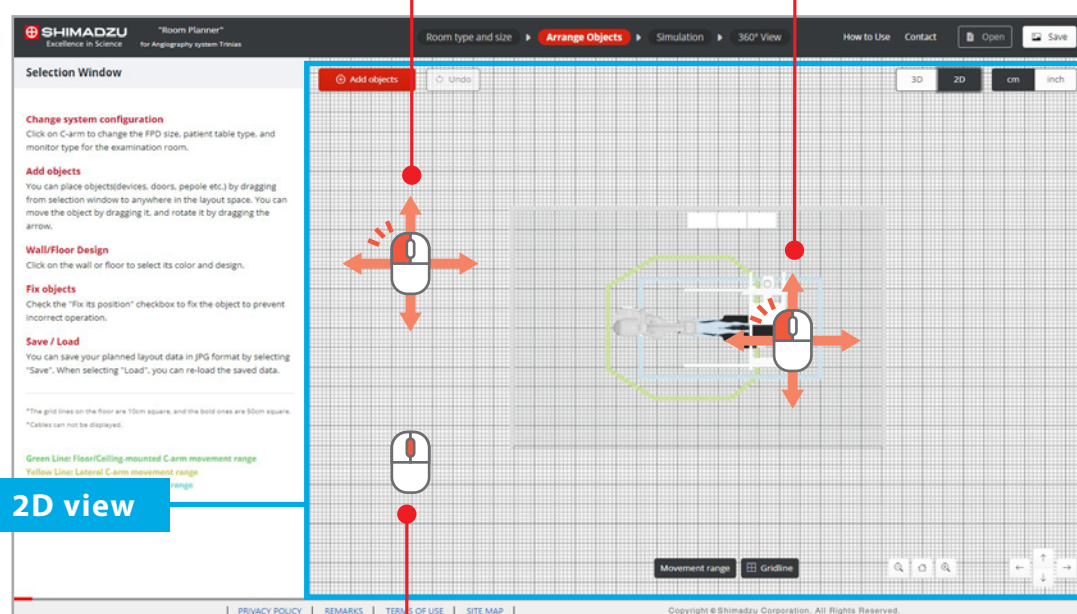
3. Basic Operation

Basic operation of 2D view

Basically all operations are performed with the mouse.

Drag the open space to rotate the viewpoint.

Click to select a system or objects and drag to move it.



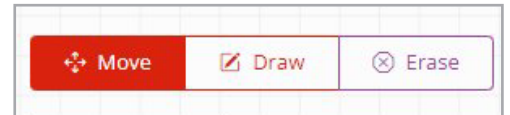
Use the mouse wheel to zoom in/out of the 2D view.

4. Operation of each step

4-1. Room type and size

Room size

Drag and move walls or add walls to set the room type and size.
Switch to the Mode tab and perform the following operations.

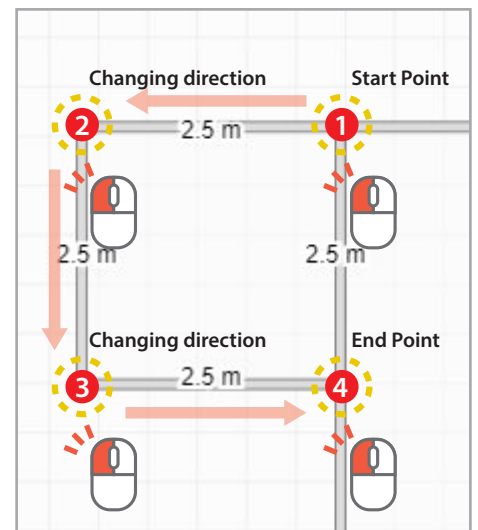


Mode Tab

Move ----- Drag the wall to move it.

Draw ----- Click and double click to draw walls.
You can draw a straight wall line freely by clicking the start point and moving the mouse.
When the edge of the wall overlaps other walls, click again to finish.
If you click where there are no other walls, you can change direction and continue drawing a wall line.
To finish drawing where there are no walls, double-click.

Erase ----- Click on the wall to erase it.

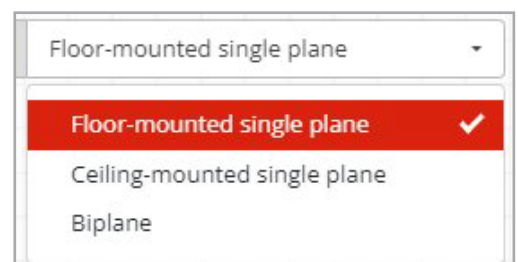


Selecting the system type

Select the system type to be installed in the angiography room from the list.



System list



4. Operation of each step

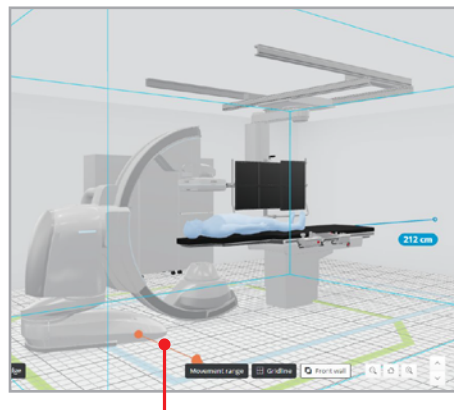
4-2. Arrange objects

Object Placement

Click and drag objects to set their position.
The 3D view allows you to place objects while checking their positioning from various angles.

Object Rotating

Click and drag the orange arrow to rotate the object.
The arrow appears by clicking on the object.



The orange arrow

Object Configuration

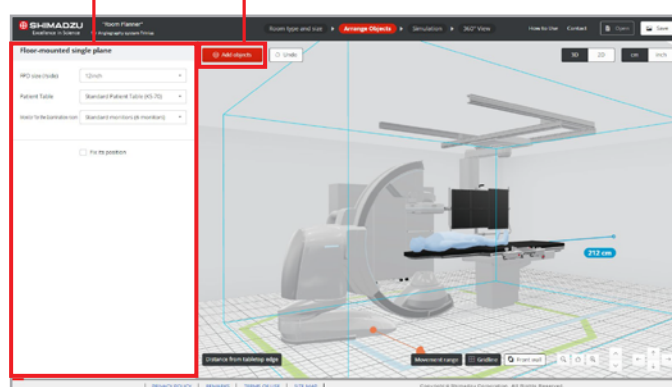
Clicking on the object displays information about it in the configuration list.

From this list, you can change the object's configuration, fix its position and erase it.

If you select a wall or floor, you can change its colors or design.

Configuration list

"Add" button for adding objects

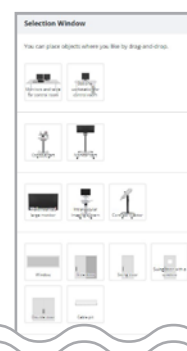


Adding Objects

Click "Add" button to display the object list.

Then drag and drop the new object into the room to add the object.

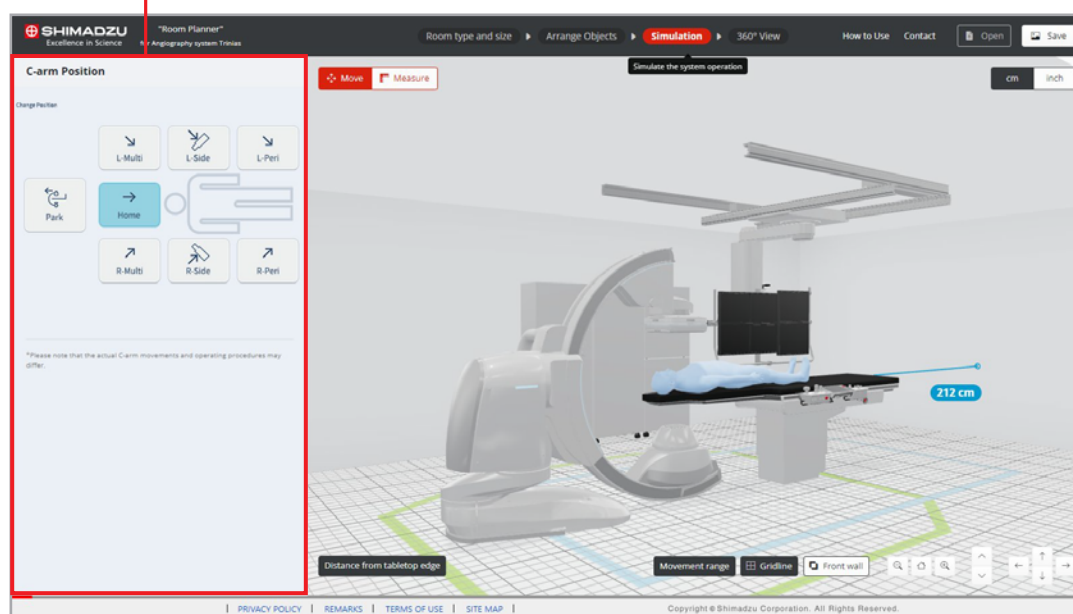
Windows and doors can also be added.



4. Operation of each step

4-3. Simulation

Simulation list



Positioning Simulation

Clicking on the C-arm or patient table displays buttons and sliders in the simulation list.

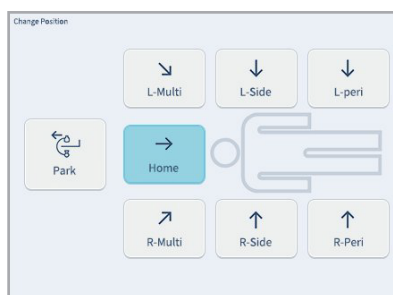
Click on the C-arm and click each button to change the position.

Click on the patient table and slide the red cursor left or right to move the table longitudinally.

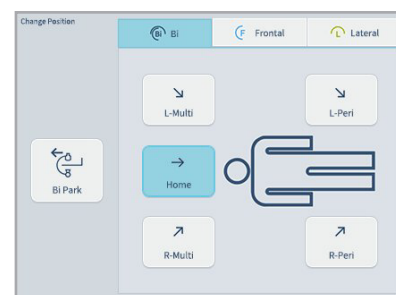
*Only the C-arm position and the longitudinal position of the patient table can be simulated.



Floor-mounted single plane



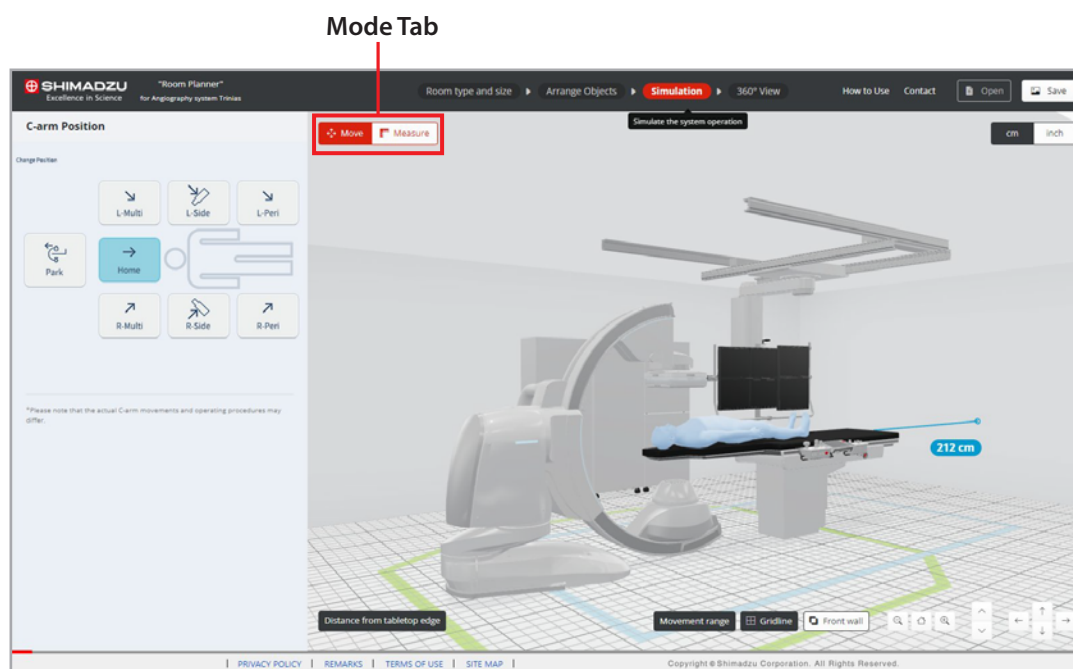
Ceiling-mounted single plane



Biplane

4. Operation of each step

4-3. Simulation



Distance Measurement

Click "Measure" button on the mode tab to measure the distance between two objects. Select "Horizontal" or "Vertical" to measure the horizontal distance on the floor or the vertical distance from the floor.

*You can only measure between object. You cannot measure open space.



Measurements

Measure the distance between two points.

Constraints

☒ None
☐ Horizontal
☐ Vertical

*You can only measure between objects. You cannot measure open space.

4. Operation of each step

4-4. 360° View

Viewing the room

Enjoy a 360-degree walk-through view as if you were in the angiography room.
Use the mouse wheel to move back and forth, or drag to change the viewpoint.

