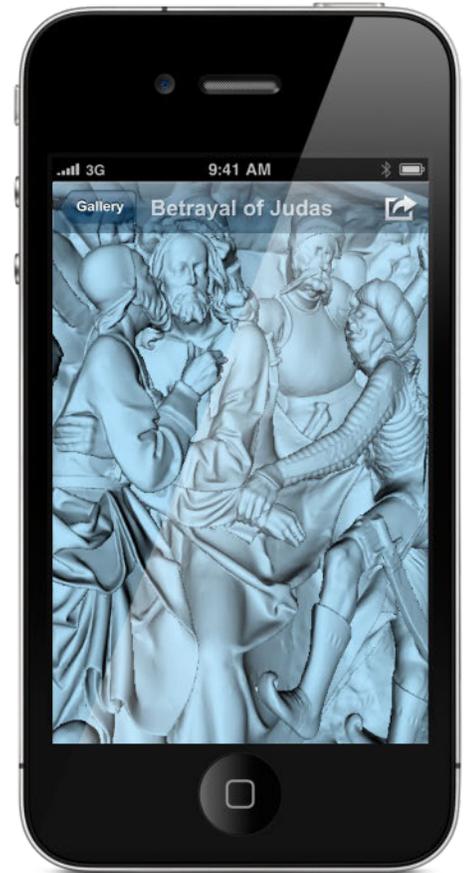


Introduction

viewshape is a novel 3d model viewer for iPhone and iPod that currently supports a set of widely used 3d model formats such as stl, ply, wrl and obj. **viewshape** was designed to fully utilize the specifics of mobile devices: small and touch sensitive screens.

First Launch

When you first open the **viewshape** application, it will load and display the readme cube. The cube contains basic instructions on how to control objects in 3D View and names all other views in the application. This model can be accessed later from your gallery or downloaded from the viewshape.com website.



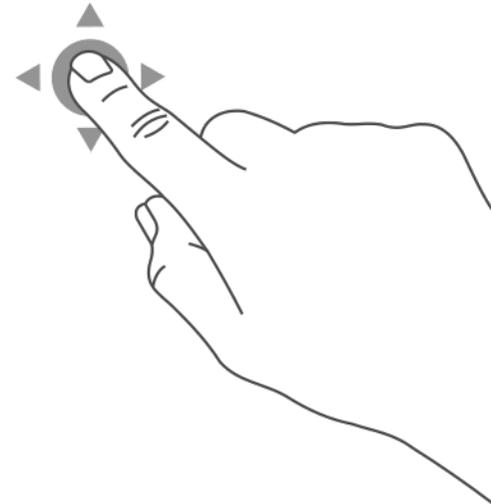
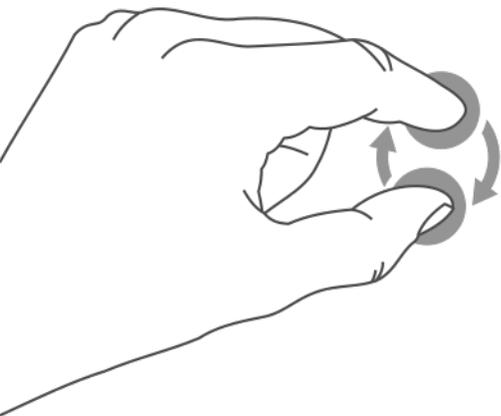
3D Model View

This is the main view of the application and the one you will be using to inspect your 3D models. The control gestures that are available here allow you to move, rotate and pinch the model. To switch to full screen mode just single tap on any point in 3D View.



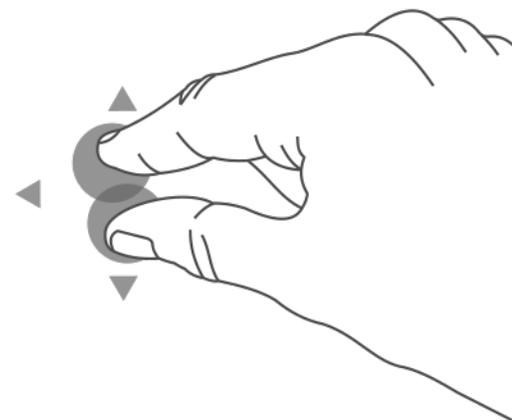
Rotation

To rotate a 3D model you can use a single finger swipe in any direction and a two-finger rotation motion if you need to rotate the model around the axis perpendicular to the screen of the device. Rotation is performed around the center of the object.



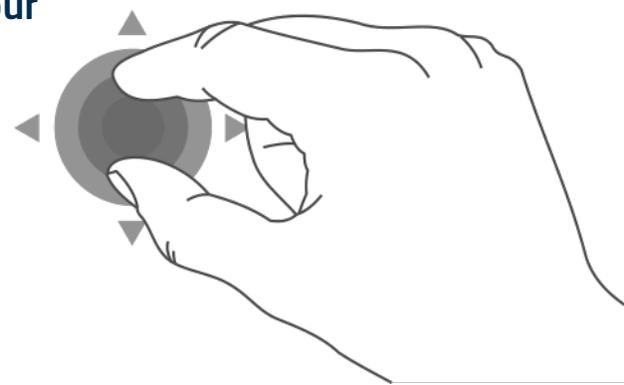
Move

To move the 3D model in any direction you need to perform a swipe gesture with two fingers (usually it is more convenient to use the thumb and index fingers for all motions involving 2 fingers).



Zoom

To zoom the model in or out, simply pinch it with your thumb and index fingers.



Toolbar

To bring the model to the default position press reload button  on the toolbar below or double tap on the screen.

To enable the built-in accelerometer and gyroscope press the  button on the toolbar. With this option turned on, rotation of the device will rotate the model as if you were trying to see the object from the side.

Next button  the Object Mode – is rendered on the screen. Available modes are:

-  Points – only vertexes are drawn on the screen
-  Wireframe – only edges of polygons are drawn
-  Solid – solid surface is rendered
-  Solid + Points
-  Solid + Wireframe

Solid mode is default mode.

Next button available on the toolbar is the Texture  switch. It controls whether the texture available in the model will be rendered as well. If the texture mapping is turned off the object will be displayed in solid color (this value can be adjusted in the Settings window).

Last button on the bottom toolbar  is the Settings window.

Beside the bottom toolbar there are another 3 buttons available on the screen:

 The Info button will display information about the model and provide you with possibility to invert model normals if needed.

 The Share button will let you perform the following operations: Email the model, Update preview, Print with AirPrint, Email bug report.

 Gallery button will return you to the Model Gallery View.

Model Gallery

Here you can view all the models stored locally on your device. Two viewing modes are available:   list view and icon view. You can delete and search models when in list view and open models from any view. Tap a model to open it.

The last opened model is highlighted in blue and is not removed from memory, so it will open quite quickly if you choose it again.



Bookmarks

The Bookmarks screen contains bookmarks to various sites with models. You can choose a site here to be opened in the built-in browser under the Download tab or organize your bookmarks (press  button and you will have the option to edit or delete any stored bookmarks).



Download

Under the Download tab the built-in browser is embedded. You can search for specific keywords here and download files from the Internet directly to the application or you can  add the current site to the bookmarks. You can download files by clicking on links in one of the supported formats or you can download zip files. In any case, they will be downloaded to Model Gallery and will open immediately.



Settings

Under settings window you can adjust the following parameters:

Emphasized motions – accelerometer and gyroscope signals are multiplied by 2 when the mode is on.

Show hidden – invisible faces will be shown in wireframe mode.

Specular light – the object material is glossy when on and matted when off.

Smooth – normal value is interpolated across the polygons so object look smooth when option is on.

Gradient background – two background variants are possible – gradient from black to blue or plain black.

Model color – allows to choose object material color.



iTunes Upload

To upload 3D models into your device, connect it to computer, open iTunes and select the device.

Go to **Apps** tab and scroll to “File Sharing” section. Select **viewshape** app and press **Add...** button, then choose files to upload.

