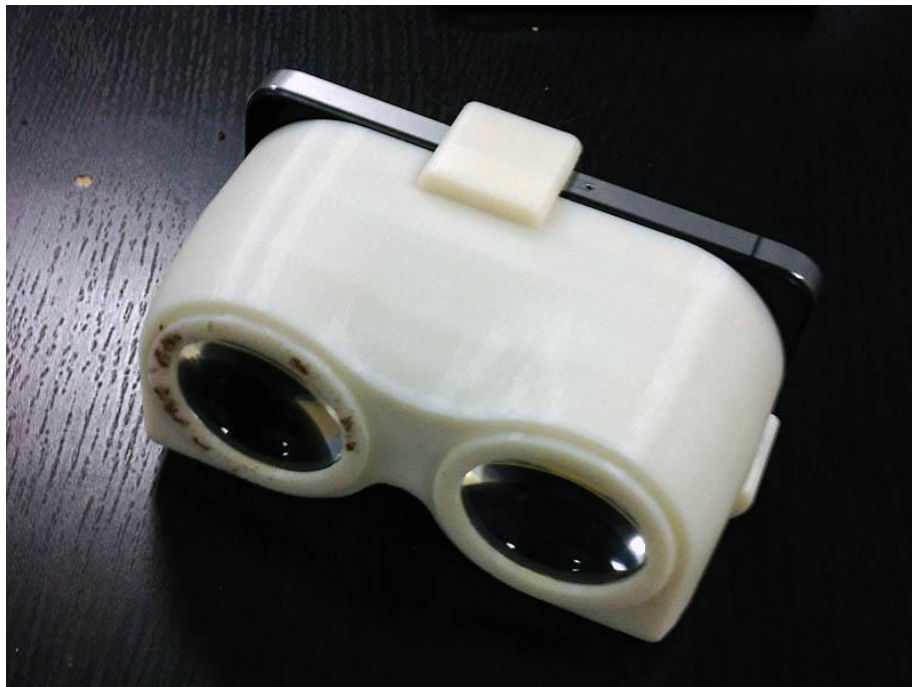




**VR2GO (VIRTUAL REALITY 2 Go)**

**HARDWARE INFORMATION PACKET**

**VERSION: V0.2**



**[HTTP://PROJECTS.ICT.USC.EDU/MXR/](http://projects.ict.usc.edu/mxr/)**

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## 1. Overview

The VR2GO mobile viewer is part of the MxR suite of low-cost immersive viewers, including the Socket HMD and the FOV2GO. This 3D printed viewer along with the accompanying software package enables the creation of 3-D, immersive virtual and augmented reality experiences using just a smart phone. These low-cost, lightweight systems can be used to create portable virtual reality applications for training, education, health and fitness, entertainment and more. Print one and start building your world today!

### Unity Compatibility

All versions of Unity

### Compatible Devices:

iPhone4/4s

iPhone5

iPod5

most Android devices

### Previous Versions

None

### Current Version:

V0.2

### Known Bugs:

None

### Contact Information/Support:

For support and questions, please contact Thai Phan at: [tphan@ict.usc.edu](mailto:tphan@ict.usc.edu), or visit

our forums at <http://projects.ict.usc.edu/mxr/forums/> and post your questions to our in-house development team.

## 2. Parts and Supplies

All models of VR2GO (iPhone4/4s, iPhone5, iPod5, Android) use the same Parts and Supplies

You will need the following materials to construct your VR2GO:

1) 3D Printer

2) Filament (ABS/PLA)

3) 2x - 7x ASPHERIC LED LIGHTED MAGNIFIER Lenses

[www.ultraoptix.com](http://www.ultraoptix.com) - Model# SV-2LPLED

[www.ebay.com](http://www.ebay.com)



4) ABS Cement

5) A mobile device (iPhone4/4s, iPhone5, iPod5, Android phone)



### 3. Assembly Instructions for iPhone/iPod

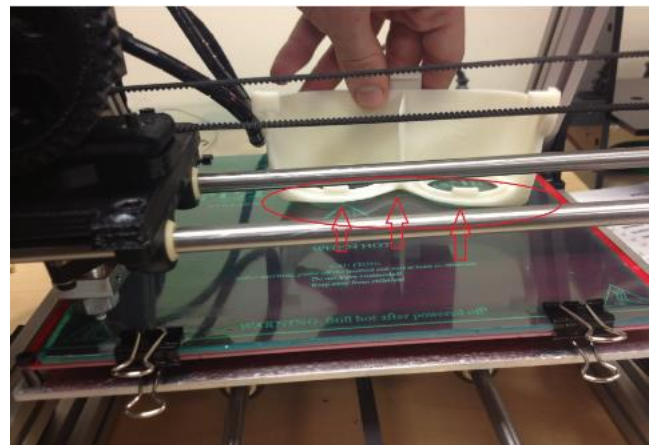
VR2GO assembly instructions are the same for each smart-device. Just download and import the corresponding STL files. For this example, we are using iPhone4/4s files.

Step1: Download and unzip VR2GO\_iPhone4-4s.zip

Step 2: Import ' iphone4\_v1\_v016\_ML.stl ' file into 3D  
printing program

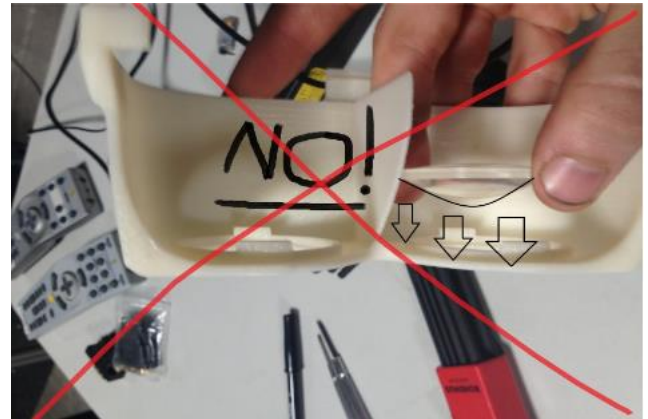
Step 3: Print VR2GO

Step 4: **CAREFULLY** remove VR2GO from  
the 3D printer  
(the bottom of the lenses are thin  
and may break since they stick to  
the printer)

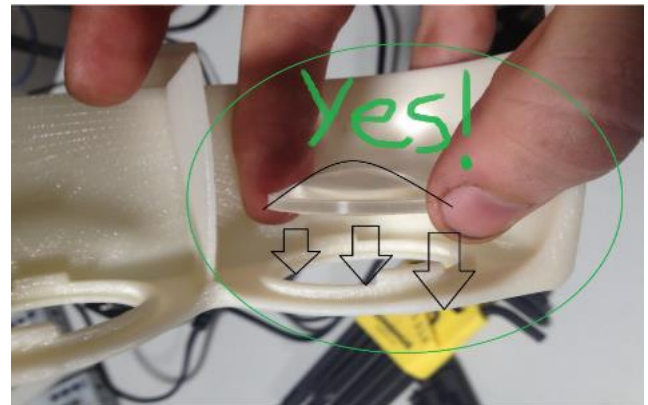


Step 5: Pop Lenses in VR2GO  
(Curved side facing IN)  
- Lenses can be glued as well  
though not necessary

NOT THIS -->



LIKE THIS!-->



Step 6: Snap VR2GO on to  
your Mobile Device  
(Screen facing IN.)



Step 7: Enjoy having a virtual reality display at the touch of your fingertips!



### 3. Assembly Instructions for Android

This stereoscopic viewer can fit most Android phones.

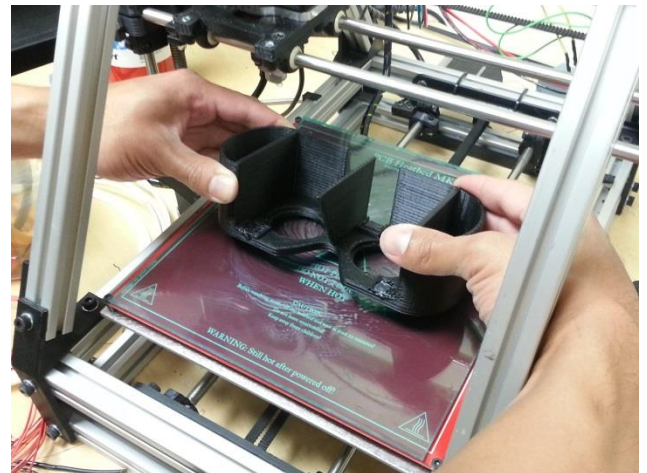
It consists of 5 total pieces: 4 hooks + 1 lens frame

Step1: Download and unzip VR2GO\_Android.zip

Step 2: Import ' androidViewerMain\_v1.stl ' file into 3D  
printing program

Step 3: Print it

Step 4: **CAREFULLY** remove the main part  
from the 3D printer  
(the bottom of the lenses are thin  
and may break since they stick to  
the printer)

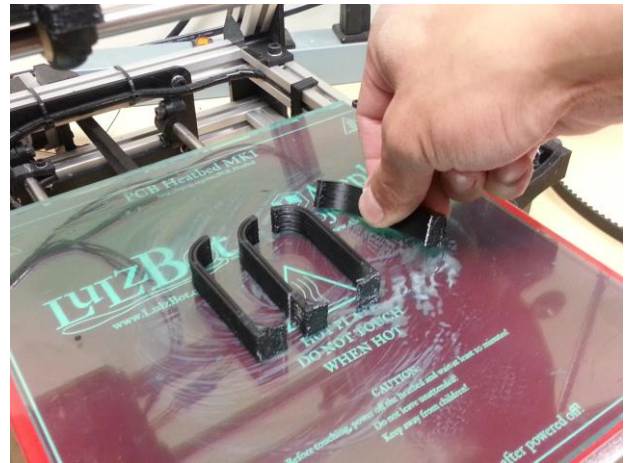




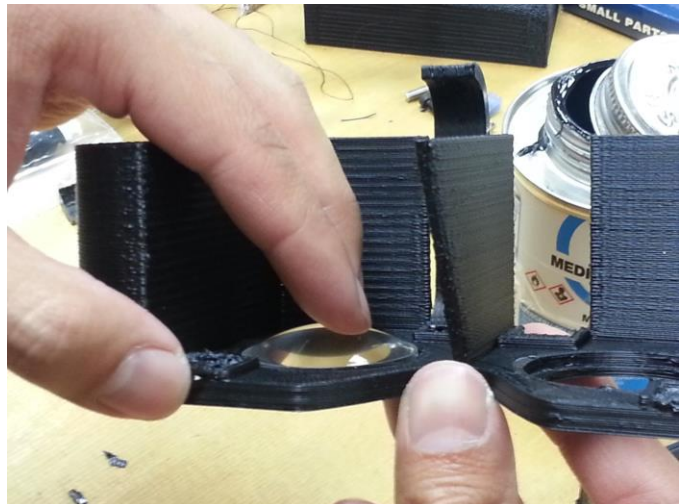
Step 5: Import ' androidViewerHooks\_v1.stl ' file into printing program

Step 6: Print it

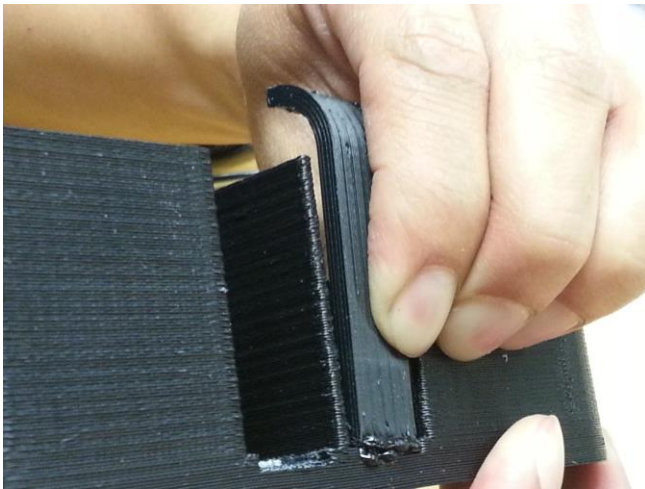
Step 7: **CAREFULLY** remove the printed hooks from the 3D printer  
(the bottom of the lenses are thin and may break since they stick to the printer)



Step 8: Pop Lenses in VR2GO  
(Curved side facing IN)  
- Lenses can be glued as well though not necessary



Step 9: Use the ABS cement to glue on all 4 hooks.



Step 10: Slide your mobile device through the hooks on your VR2GO.

Step 11: Enjoy having a virtual reality display at the touch of your fingertips!



#### **4. Partnered Software:**

The MxR Unity Package supports the VR2GO, and is available at

<http://projects.ict.usc.edu/mxr/open-source/mxr-code/>

This package consists of all software necessary to run VR2GO and all MxR Projects.

Instructions and documentation for software is included in download.

#### **5. Credits/Acknowledgements:**

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Stereoscopix for Unity by Perry Hoberman. Copyright (c) 2011-2014 University of Southern California. All rights reserved.

MxR Lab: Mark Bolas, Perry Hoberman, Thai Phan, David Krum, Evan Suma, Adam Jones, David Nelson, Palmer Luckey

#### **6. Licensing Agreement**

If you would like to download any of the MxR Hardware and Software files please refer to our licensing agreement at:

[Projects.ict.usc.edu/mxr/license](http://Projects.ict.usc.edu/mxr/license)