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DREAM ARVR

DREAM ARVR is an educational equipment that helps to learn about to realize VR(Virtual Reality) and AR(Augmented Reality) through VR HMD, AR HMD, and 360 degree camera.

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V2.1.0

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OCULUS GO

- Standalone VR without PC
- Configurable on all Android smartphones with software version 6.0 (Marshmallow) or higher
- Configurable on all iPhones with iOS version 10 or higher
- Application Processor : Qualcomm Snapdragon 821
- Resolution : 2560 * 1440 WQHD
- Basic learning about VR game development through Unity
- Learning about 3D technology using POLY library
- Learning about stereo sound technology using Audio Spatializer

OCULUS GO is a VR HMD (Head Mounted Display) which allows you to experience virtual reality and learn the skills to realize it.

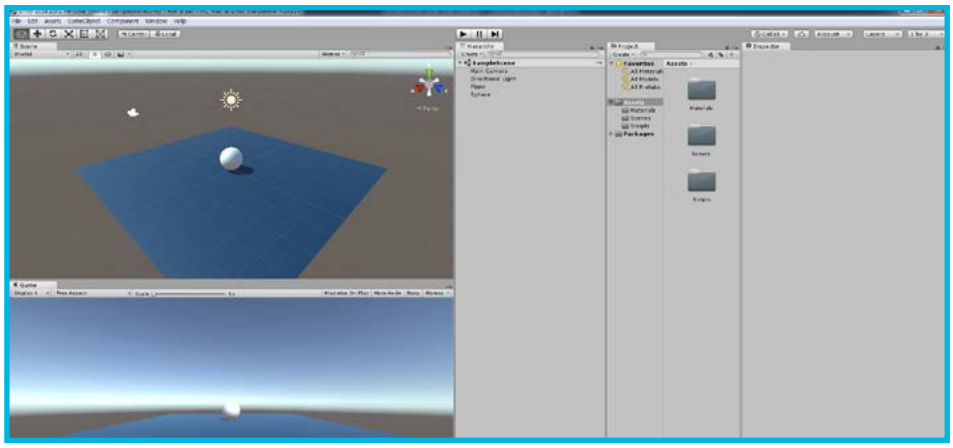
Product Overview

Oculus Go is a HMD (Head Mounted Display) that allows to experience VR (Virtual Reality). VR has wide range of applications such as image contents, game industry, healthcare, telesurgery, and interior design. You will learn how to use the Unity engine, the POLY library, the Audio Spatializer, and 360-degreee camera as well as basic techniques for game development, C#, Java, etc. in this tutorial.

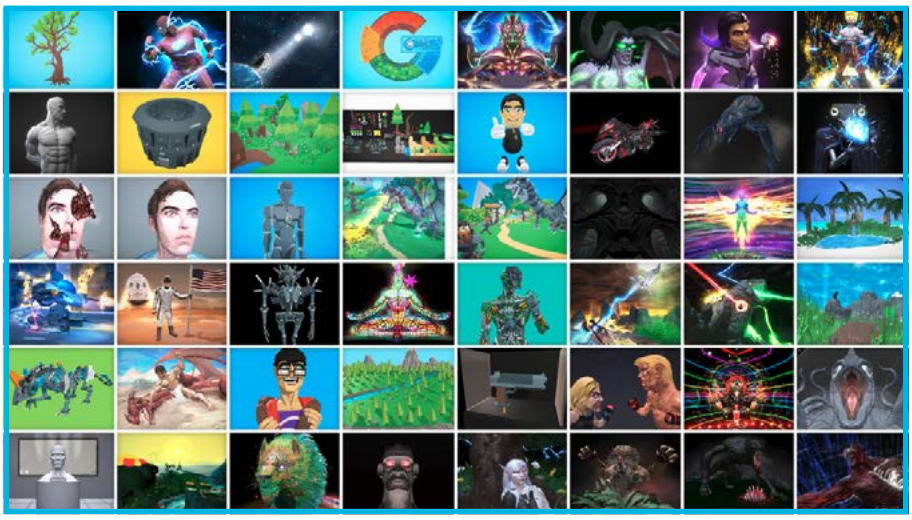
Product Features

- Learn how to create VR games and applications through Oculus Go, the world's 1st VR headset
- High-definition guaranteed by 2580 * 1440 WQHD
- Learn how to use Unity engine and how to set up development environment
- Learn about POLY library and how to use it
- Learn about theory and implementation of Audio Spatializer
- Learn basic skills of VR game development through several examples

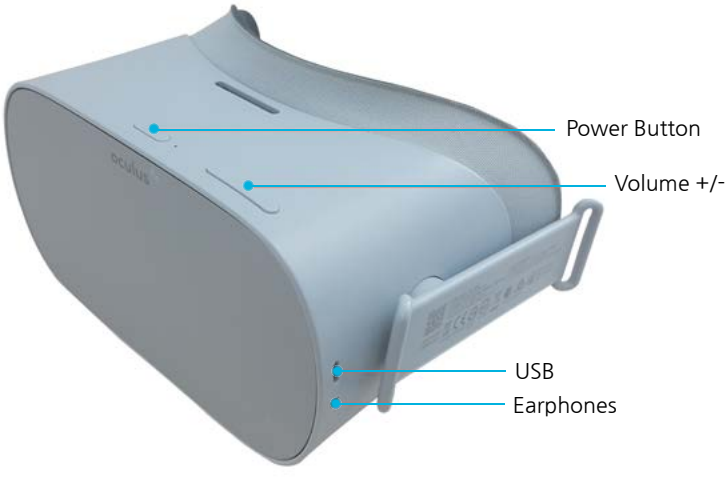
Unity Engine

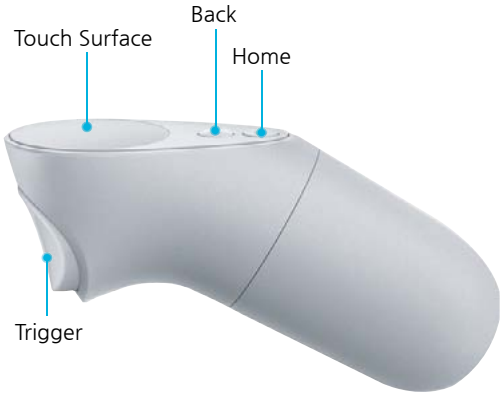


POLY Gallery



Product Configuration and Name of Each Part





Hardware Specification

Category	Specification
PLATFORM	Android OS
DISPLAY	Fast-Switch WQHD LCD
RESOLUTION	2560 X 1440
REFRESH RATE	60-72Hz
CPU	Qualcomm Snapdragon 821
FIELD OF VIEW	100 degree
IPD	64mm
CONTROLLER	- Dimensions : 111mm X 37mm X 57mm - Weight : 65g (including 25g AA battery)
SENSORS	Orientational Tracking
TRACKING AREA	Yes
CONNECTIONS	3.5mm Audio Jack, USB Micro-B port with USB2.0

Category	Specification
LED STATES	- White (static) : Screen on - Blue (blink) : Connected to the companion app - Red (static) : Low battery indicator - Orange (static) : Charging, but not full - Green (static) : Charged with full battery
BUILT IN AUDIO	Yes
BATTERY	- Built-in Lithium Ion Battery - 1.5-2 hours of gaming
CHARGE TIME	~ 3 hours with 10W AC adapter
WEIGHT	468g
DIMENSION	190mm X 105mm X 115mm
MATERIAL	Fabric, Plastic

Software Specification

Category	Specification
Unity Engine	Unity Download Assistant-2018.2.0f 2.exe
Oculus Go ADB driver	Oculus-go-adb-driver-2.0
POLY toolkit	Poly-toolkit v1.0.3.unitypackage
Audio Spatializer SDK	Unity-Technologies-nativeaudioplugins-2018.2

Contents of Provided Examples

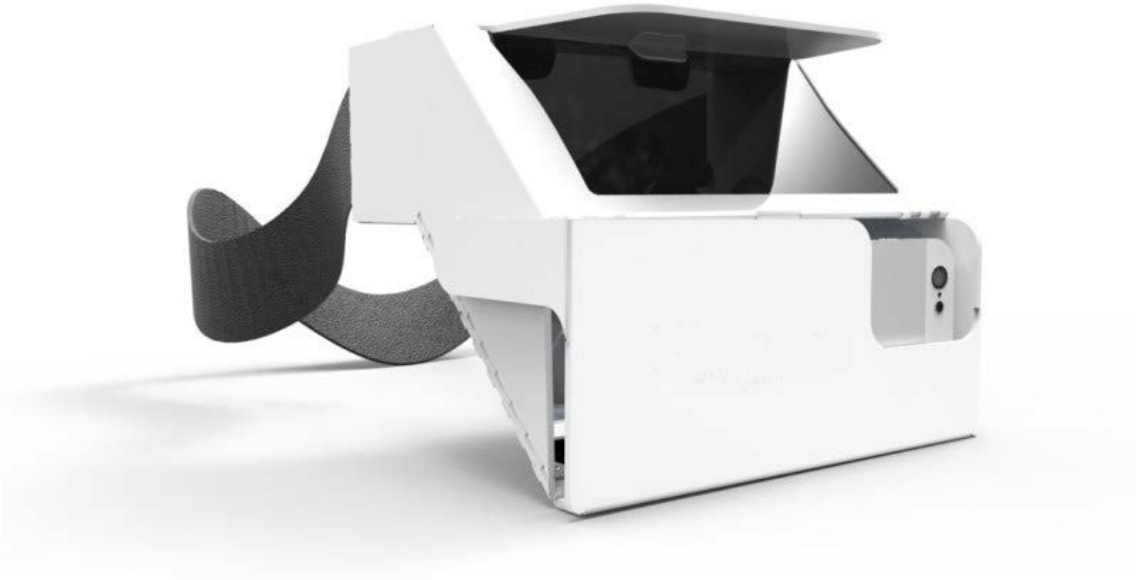
Example	No. of Files & Application size
Sound of Forest	23 files / 61.7KB
World Tour Sightseeing	2 files / 124.7KB
Town Navigation	1 file / 38KB
Shooting Game	61 files / 71.8KB
Show Room	13 files / 49.3KB

VR Screen

Aryzon

Aryzon is an AR HMD (Head Mounted Display), which allows you to experience AR (Augmented Reality) and learn the skills to realize it.

- Working on all Android and iOS smartphones
- Learn about Vufuoria from Unity to create AR
- Learn the principles and implementation techniques for AR through examples



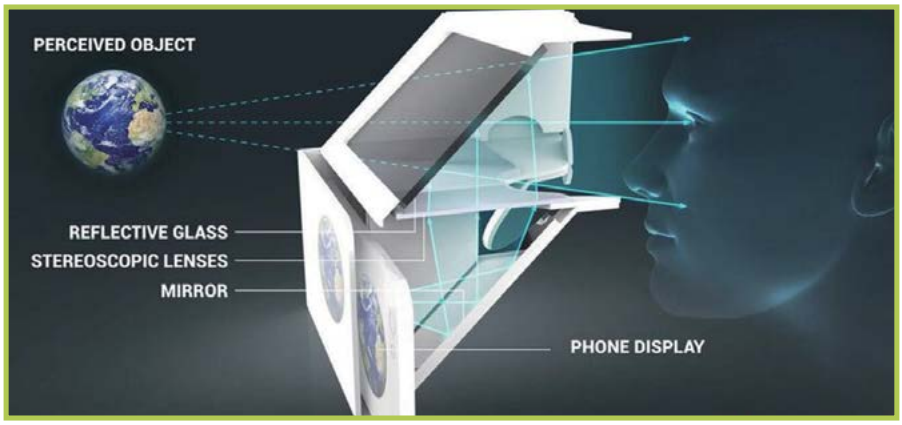
Product Overview

Aryzon is an HMD (Head Mounted Display) which allows you to experience AR (Augmented Reality). It is expected to be applied in more and more diverse applications as well as broadcasting, games, education, medical, manufacturing, shopping, exhibition, and marketing, etc. In this tutorial, you will learn how to use Vuforia, 360-degree camera, C#, Java which is necessary for AR development. Besides, you will also learn the basic principles of AR such as motion tracking, environment understanding, light estimation, etc. in addition to the implementation process through examples.

Product Features

- Experience Augmented Reality that shows virtual objects superimposed on the real world
- Learn how to use Vuforia engine to build Augmented Reality and how to set up the development environment
- Learn basic concepts of Augmented Reality such as motion tracking, environment understanding, and light estimation through basic examples
- Learn about Marker-based AR, Markerless AR through AR examples

Product Configuration and Name of Each Part



Hardware Specification

Category	Specification
Field of View	35 X 20 (degree)
Headstrap	Yes
Foam cushion	Yes
Operated on	All kinds of Smart phones which operate AR Kit & AR Core

Contents of Provided Examples

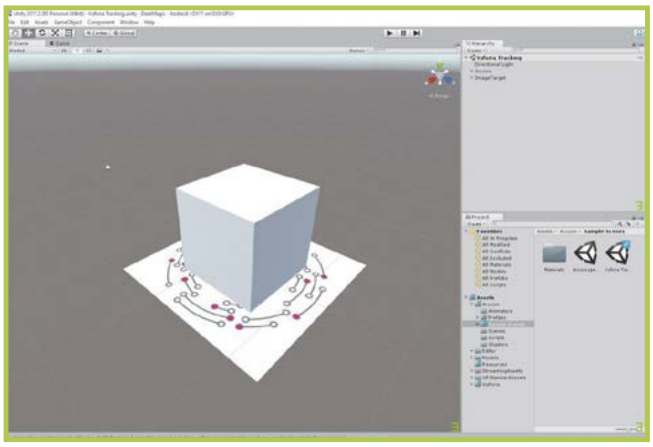
Example	No. of Files / Application size
Marker-based 3D Character	1 file / 16.8MB
Marker-based 3D Animation	3 files / 18.6KB
Markerless Interior Design	1 file / 22.3KB

Software Specification

Category	Category
Aryzon SDK	Completely Free and Open-Source
Features of Aryzon Application	Designed for out-of-the-box use of the Google Poly library
Aryzon 3D AR Tool	Easy 3D Modeling with Aryzon 3D Model Importer

AR Screen

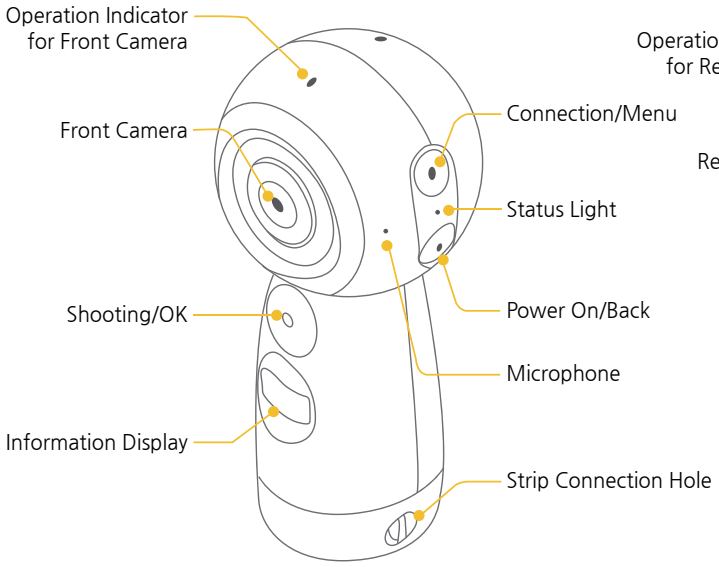
Development Environment for Unity + Vuforia

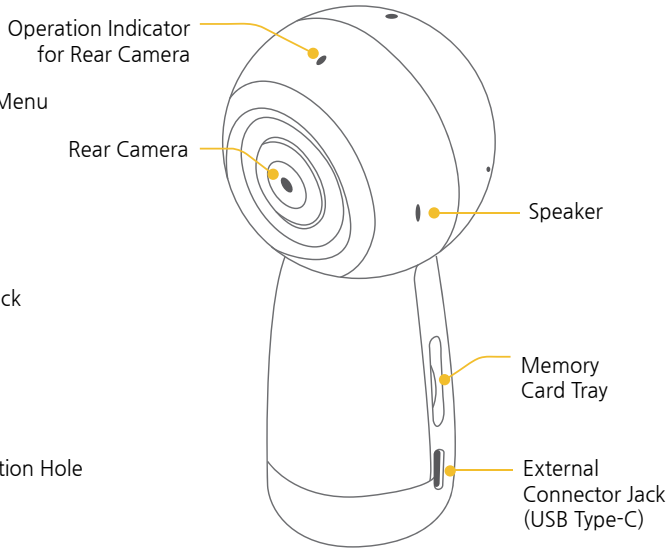


Gear 360

Gear 360 is a camera that can take 360-degree pictures. The demand is increasing due to the advantage that it enables users to create VR contents on their own. You can create needed contents with this device when creating Virtual Reality.

Product Configuration and Name of Each Part





Hardware Specification

Category	Specification
Camera	15 million pixel F2.0 fisheye lens (Viewing angle 195 degrees) X 2
Video Resolution	Dual-Cam : 3840 X 1920 (30fps) / Single-Cam : 2560 X 1440 (30fps)
Photo Resolution	Dual-Cam : 7776 X 3888 (30M) / Single-Cam : 3072 X 1728 (5M)
Camera Mode	Photo, Video, Time-lapse Video, Loop video
Screen	0.5 inch PMOLED

Category	Specification
Storage	Micro SD Slot (Max.128GB)
Network	Wi-Fi 802.11a / b / g / n / ac, Wi-Fi Direct, Bluetooth 4.1, NFC
Sensors	Gyro Sensor, Acceleration Sensor
Battery	Removable Type, 1350mAh
Codecs	Video: MP4 (H.265), Photo: JPEG
Size & Weight	6.7 X 56.2 X 60mm, 153g
Terminal Type	USB 2.0
Others	IP53 rated waterproof and dustproof

Textbook Chapter