

Mixed Reality with Windows 10

With the Fall Creators update of Windows 10, Microsoft included *Windows Mixed Reality*. They chose this name because they believe that the experiences of *Virtual Reality* and *Augmented Reality* (HoloLens) will eventually blend together.

There is an evolving catalog of *Mixed Reality* experiences: immersive and casual games, travel, 360° videos, creativity, social, live events, and more.

[Overview of Mixed Reality](#)

[10 things you can do in Windows Mixed Reality right now](#)

[There are an increasing number of *Mixed Reality* apps available](#)

To run *Mixed Reality* you need a special *Mixed Reality* headset and compatible high-end PC.

New Mixed Reality Edge Extension

With the 360 Viewer extension and a *Windows Mixed Reality* headset plugged into your PC, you can view 360° videos and photos in your headset from Microsoft Edge by clicking the *Windows Mixed Reality* icon that has been added to the video or photo.

You can also navigate to a website in Microsoft Edge on your desktop, play a 360° video and click on the *Mixed Reality* icon. This will automatically launch *Windows Mixed Reality* and start playing the 360° video in your headset.

Once you have downloaded this extension, you can browse Facebook.com and see 360° photos, watch 360° YouTube videos of a shark encounter or enjoy 360° videos from the NYTimes website, for example.

Equipment required for Mixed Reality with Windows 10

Windows Mixed Reality Headset (Example)

Dell Visor Windows Mixed Reality Headset with Motion Controllers: \$799 (from Microsoft Store)

- Two high-resolution liquid crystal displays at 1440 x 1440
- 2.89" diagonal display size (x2)
- Front hinged display, so you can flip the headset up while working
- Up to 105 degrees horizontal field of view
- Display refresh rate up to 90 Hz (native)
- Built-in audio out and microphone support through a 3.5 mm jack
- Single 4m cable with HDMI 2.0 (display) and USB 3.0 (data) for connectivity
- Inside-out tracking



<http://accessories.ap.dell.com/sna/productdetail.aspx?c=au&l=en&s=dhs&cs=audhs1&sku=545-BBBH>

Virtual Reality Definition

A Computer-generated simulation of a three-dimensional image or environment that can be interacted with in a seemingly real or physical way

Augmented Reality Definition

A technology that superimposes a computer-generated image (hologram) on a user's view of the real world, thus providing a composite view.

Windows Mixed Reality-ready PC (example)

Dell XPS 15 A560297AU Laptop: AU\$2,999.00 (from Microsoft Store)

- Display: 15.6 in UltraSharp 4K UHD InfinityEdge touchscreen (3840 x 2160)
- Processor: Intel Core i7-7700HQ 6M cache up to 3.80 GHz
- Memory: 16GB DDR4 2400 MHz
- Hard drive size: 512GB SSD
- Operating system: Windows 10, 64-bit
- Optical drive: None
- Media drive: SD card reader (SD/SDHC/SDXC)
- Audio: Waves MaxxAudio Pro
- Video: NVIDIA GeForce GTX 1050 with 4GB GDDR5 VRAM
- Ports: 1 Thunderbolt 3 • 2 USB 3.0 with PowerShare • 1 HDMI • Headset jack
- Battery: 6-cell 97Whr lithium-ion*
- Camera: Widescreen HD 720p
- Wireless: 802.11ac (Miracast enabled)
- Bluetooth: Bluetooth 4.1
- Dimensions: 357.00 x 235.00 x 11.00-17.00 mm
- Weight: 2.04 kg
- Color: Silver
- Model number: A560297AU



Check if your existing computer satisfies minimum specifications

The minimum requirements are set out below. There is an app you can download from Microsoft that will check your PC's capability.

<https://www.microsoft.com/en-au/store/p/windows-mixed-reality-pc-check/9nzvl19n7cnc>

Minimum Computer specifications

Operating system: Windows 10 Fall Creators Update or later

Processor: Intel® Core™ i5 4590 (4th generation desktop), quad core or better

Processor: AMD Ryzen 5 1400 3.4Ghz (desktop), quad core or better

RAM: 8GB DDR3 or better

Disk space: 10 GB

Graphics card: Integrated Intel HD Graphics 620 or greater DX12-capable integrated GPU

Compatible GPUs:

Nvidia GTX 960/1050 or greater DX12-capable discrete GPU

AMD RX 460/560 or greater DX12-capable discrete GPU

Graphics driver: Windows Display Driver Model (WDDM) 2.2

Graphics display port: HDMI 1.4 or DisplayPort 1.2

Monitor: External or integrated VGA (800x600) monitor

USB type: USB 3.0 Type-A or Type-C

Bluetooth type (for controllers): Bluetooth 4.0