

HoloLens2 Content Sharing

Contents

| | |
|--|---|
| Retrieving photos or videos from the device portal | 2 |
| Capture a Photo | 2 |
| Capturing Video | 3 |
| Sharing Real-Time Views | 4 |
| Stream with Miracast..... | 4 |
| Stream with Windows Device Portal..... | 4 |
| Stream with Microsoft HoloLens Companion App | 4 |
| Stream with Microsoft Dynamics 365 Remote Assist app (Microsoft Teams) | 4 |
| Using the Microsoft Wireless Adapter (Wireless Dongle) | 5 |
| Connecting the adapter to your display..... | 5 |
| Where to find more information: | 6 |

This guide covers only the most basic information needed to get started with sharing your HoloLens experience with others. There are many more topics and information to be found in the Microsoft Learning pages.

<https://learn.microsoft.com/en-us/>

Retrieving photos or videos from the device portal

To download photos, videos, or other saved media from your HoloLens, you will need to set up the device portal. There are several steps to this process, to make sure you have configured your device to work with the portal, follow the instructions on the Microsoft Mixed Reality learning page.

Visit the Microsoft learning page for more information on setting up the Device Portal:

<https://learn.microsoft.com/en-us/windows/mixed-reality/develop/advanced-concepts/using-the-windows-device-portal>

Capture a Photo

There are three ways to take a photo with the HoloLens:

1. HoloLens device buttons
2. Voice
3. Using the Start Menu

You must make sure your device camera is enabled in order to use these functions.

(Settings > Privacy > Camera)

1. Using the HoloLens device buttons to take a photo:

- To take a photo of what you are currently viewing, press the **volume up and volume down** buttons at the same time. These buttons are located on the right side of the headset.

2. Using Voice commands to take a photo:

- Ensure speech commands are enabled (Settings > Privacy > Speech)
- Say “**Take a picture**” and you will see a brief preview of the photo when it is captured.

3. Using the Start Menu to take a photo:

- Use the Start gesture to go to **Start**, then select the **Camera** icon.
- Turn your head toward what you it is you want to take a photo of, then use the “**air tap**” gesture to capture. This can be repeated for as many photos as you would like to capture.
- Use the Start gesture again to end photo capture.

Visit the Microsoft learning page for more information on photo capture:

<https://learn.microsoft.com/en-us/hololens/holographic-photos-and-videos>

Capturing photos allows you to incorporate real time views into your exams, lecture slides, or study materials. For example, you would like your students to capture labels on the heart valves in HoloHuman as this will be on a quiz. Capture an in-app photo with blank labels and ask the students to identify the designated areas.

Capturing Video

There are three ways to capture a video with the HoloLens:

1. HoloLens device buttons
2. Voice
3. Using the Start Menu

You must make sure your device camera is enabled in order to use these functions.
(Settings > Privacy > Camera)

1. Using the HoloLens device buttons to capture a video:

- To take a video of your current view, press and hold the **volume up and volume down** buttons at the same time until a 3 second timer appears. These buttons are located on the right side of the headset.
- To stop the recording, tap the volume up and volume down buttons at the same time.

2. Using Voice commands to capture a photo:

- Ensure speech commands are enabled (Settings > Privacy > Speech)
- Say “**Start recording**”, to stop the video capture say, “Stop recording”.

3. Using the Start Menu to capture a video:

- Use the Start gesture to go to **Start**, then select the **Video** icon.
- Turn your head toward what you it is you want to take a video of, then use the “**air tap**” gesture to capture.
- The recording will automatically stop after 5 minutes, or you can use the Start gesture again to end the video capture.

Visit the Microsoft learning page for more information on video capture:

<https://learn.microsoft.com/en-us/hololens/holographic-photos-and-videos>

Capturing videos allows you to incorporate real time views into your exams, lecture slides, or study materials. For example, you would like to show the electrical activity of the heart with Insight Heart to illustrate your classroom discussion. You could then post that video within your class website for students to review after they experience the app in lab.

Sharing Real-Time Views

You are able to share real-time views from the HoloLens, this allows your audience to experience your views in the GigXR apps as you see them. There are several ways you can share in real time.

- Miracast to an enabled device or TV
- Windows Device Portal
- Microsoft HoloLens companion app
- Microsoft Dynamics 365 Remote Assist app. (You must have Remote Assist access for this option.)

Windows Device Portal and HoloLens companion app require HoloLens to be in Developer Mode (Settings > Update > For Developers > Enable Developer Features)

Stream with Miracast

- Use the Start gesture to go to **Start**, then select the **Display** icon.
- Select the enabled device or adapter you want to connect to.
- To stop sharing, use the Start gesture and select the **Display** icon.

Note that during streaming, nothing is saved to the HoloLens device.

Stream with Windows Device Portal

- Use the Start gesture to go to **Start**, then select the **Connect** icon.
- Select the enabled device or adapter you want to connect to.
- To stop sharing, use the Start gesture and select the **Connect** icon.

Stream with Microsoft HoloLens Companion App

- Open the HoloLens Companion App.
- Select Live Stream.

Stream with Microsoft Dynamics 365 Remote Assist app (Microsoft Teams)

For this option to work, you must have a Dynamics 365 Remote Assist account.

- Launch Dynamics 365 Remote Assist on your HoloLens
- Log into your Microsoft/Teams account
- Join the call or meeting you will be presenting in
 - Camera needs to be set to show headset perspective
 - Microphone needs to be set to use headset communication

- Launch the GigXR app you will be using
- **Manually enter your username and password to log in.** The camera can only perform one function at a time, so manual entry is needed here.
NOTE: This will show your password to others on the call.
- Open a session in the GigXR app as you normally would. You will not see the meeting in progress, but you will be present in it and sharing your headset view.
- When you finish with the GigXR app, close the session and log out as usual
- Launch the Remote Assist app to re-enter it and close the Teams meeting from there. Close the Remote Assist app.

Visit the Microsoft learning page for more information on the Windows Device Portal:

<https://learn.microsoft.com/en-us/windows/mixed-reality/develop/advanced-concepts/using-the-windows-device-portal>

Streaming via Miracast is the easiest and least involved method of sharing your real-time views from the HoloLens. You do not have to be in Developer Mode or have an account in Dynamics 365. You can also purchase a Microsoft Wireless Display Adapter that will allow you to have a direct connection to a projector or TV screen. Miracast and the Wireless Adapter allow you to stream content with virtually no delay.

Using the Microsoft Wireless Adapter (Wireless Dongle)

The Microsoft Wireless Adapter is an easy way to seamlessly stream your content to a projector or TV screen with very little lag. This device is sold separately from Microsoft, but it can also be purchased through other third-party retailers.

Some quick tips for the Wireless Adapter:

- The adapter works best if you have both an HDMI port and a USB charging port on your HDTV, monitor, or projector.
- The adapter needs to be connected to a USB charging port as it draws power from the USB connection.
- Make sure your HoloLens has the latest updates.
- Make sure the adapter has been updated to the latest firmware.

Connecting the adapter to your display

Setting up the adapter on your display:

- Plug the HDMI end of the adapter into the HDMI port on the HDTV, monitor, or projector.

- Plug the USB end of the adapter into a USB charging port on your display. If your display does not have a USB charging port, you can plug the USB end into a standard USB-A charger with 5W (5V/1A).
- On your display, set the input to HDMI.

Where to find more information:

Using the Windows Device Portal:

- <https://learn.microsoft.com/en-us/windows/mixed-reality/develop/advanced-concepts/using-the-windows-device-portal>
 - To download the Windows Device Portal:
<https://apps.microsoft.com/store/detail/microsoft-hololens/9NBLGGH4QWNX?hl=en-us&gl=us>

Capturing Photos and Videos in Real-Time:

- <https://learn.microsoft.com/en-us/hololens/holographic-photos-and-videos#share-what-you-see-in-real-time>

Connecting your HoloLens to Bluetooth or USB devices:

- <https://learn.microsoft.com/en-us/hololens/hololens-connect-devices>

Setting up your wireless adapter:

- <https://support.microsoft.com/en-us/surface/use-the-microsoft-wireless-display-adapter-e3c36815-74b2-b6fb-f09a-923ef28fd5fb>

If you have questions or problems that aren't addressed in this Guide, please contact support@gigxr.com with the details of the issue, and we'll respond with appropriate help.